

The effectiveness of brief therapy
provided through an Employee Assistance Programme for a U.K. local
authority:
gender, age and professional status differences in outcome.

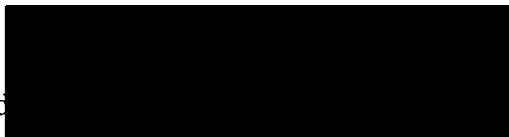
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I certify that this thesis is the true and accurate version of the thesis approved by the
examiners.

Signed



(Director of Studies)

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ABSTRACT: The effectiveness of brief therapy provided through an Employee Assistance Programme for a U.K. local authority: gender, age and professional status differences in outcome.

The provision of Employee Assistance Programmes (EAPs) in this country has seen a rapid growth in recent years. However, there has been relatively little research into the effectiveness of such programmes in reducing costs of sickness/stress, absenteeism or in improving work place performance, particularly with respect to gender, age and professional status differences in responses to counselling. This research sought to evaluate the clinical change produced by a very specific mode of counselling which was 'brief' (up to a maximum of 8 sessions). The research also aimed to estimate the costs of stress to the organisation more accurately, by way of costing absenteeism and 'presenteeism' (the level of efficiency at which the employee estimates s/he is working). The first stage of this research was to find the baseline scores for the measures going to be used for the counselling sample. 'Well-being' questionnaires were randomly distributed to the 17,500 workforce (i.e. 5295 questionnaires were sent out). Over 2,300 responses were received. The results from this stage allowed for baseline mean scores to be obtained for all measures used. The responses focussed on the interaction between gender and other demographic variables such as age and professional status, and the effects of those interactions on the various means for stress factor and coping strategy responses. The second stage of the study examined the change process for clients coming for brief therapy as provided to them under an external EAP (241 subjects). The mean scores on a variety of scales at the pre-treatment stage were matched against responses at the post-treatment stage and again at a six month follow-up stage, and these scores were compared with the baseline means obtained for each factor from the earlier 'Well-being' study of the whole organisation. The process of matching looked at whether there were significant changes between the stages of the study and whether the changes produced clinically significant and reliable change. The effect size of that change was also examined. It was found that the counselling process was effective in reducing the costs of the work stress, sickness and 'presenteeism' in the counselling sample. However, the male and female clients responded differently. It was also seen that the counselling process was effective in producing change in work stress, particularly with respect to 'home/work interface', mental health, work and personal functioning, and in most of the coping strategies examined. The relevance of these findings is discussed in relation to implications for policy, research and practice.

1. Introduction

Six million people in the UK suffer from mental illness each year (MIND, 1993). A company of 1000 employees can expect between 200 and 300 people to suffer from depression and/or anxiety in one year and one suicide every decade (CBI Conference, 1991). Each year in this country, 8 million working days are lost through alcohol and drink related disease, 35 million through coronary heart disease and strokes, and 80 million through mental illness (CBI Conference, 1993). By far the commonest forms of mental illness are depression and anxiety (The Mental Health Foundation, 2005). With their accompanying symptoms of fatigue, poor concentration and irritability, depression and anxiety may cause problems, not just at home with the family, but also in the workplace, leading to increased sickness absence, increased labour turnover, lowering performance, poor relationships with colleagues and even to accidents. The financial cost of mental illness to industry was estimated in 1992 at more than £3.5 billion a year (MIND, 1993). In order to try to reduce these costs Employee Assistance Programmes were introduced into this country in the early 1980s.

I am a Chartered Counselling Psychologist and in 1996 I was working as a counsellor providing brief therapy (up to eight sessions) for an EAP provider in the City of London. At that time it occurred to me that this was a very useful service to the multitude of businesses that used our services. But it also occurred to me that providers of such services were selling the concept of EAPs, claiming it was a cost effective way of trying to solve the problems of sickness and stress in the work place. However, the amount of research into the effectiveness of such services seems to be rather limited within the British context. So I put it to the organisation for whom I worked (PPC) that it would be a good idea to carry out some research to test the selling proposition that EAP provision was cost effective, and if it was for whom it was most effective.

At the same time an organisation (Norfolk County Council) had just bought the service for their Education and Social Services departments and wanted to be able to show that the money they were spending on buying the service was cost effective, so they willingly bought into the idea that they could be the subject of such research. Thus this

research study was undertaken to examine the effectiveness of the brief therapy as offered by an Employee Assistance Programme provider to this local authority.

Further in order to provide some sort of control group against which to measure the changes/effectiveness of the counselling as offered within an EAP, a large 'stress audit' was carried out within the organisation's population from which the counselling clients would be coming, though this part of the study grew further than was planned, as the whole of the council wanted to be part of this stage of the study, not just the departments who had bought the EAP programme.

I would like to also add that I did not see myself as an academic undertaking a research project but as a practitioner who wanted to answer some real and useful questions that would be of use to the practitioner. As such I was aware that carrying out a piece of research in a real setting would lack some of the rigours of experimental controls, but it was my experience that carefully controlled research often produced conclusions that were interesting but not of much use to a therapist in the real world of therapy which by its nature can be influenced by many uncontrollable factors. Thus the tools used or the measures examined had to have some face validity to me as a practitioner and the setting of the research had to be real so that, I and other practitioners like me, would be able to make real sense and use of the findings within the world in which I and they work.

2. Literature review of subject areas relevant to this study

2.1 Introduction

This study set out to examine the effectiveness of brief therapy as provided by an employee assistance programme (EAP). In order to examine this effectiveness it was important to define the variables which will be used to measure change and hence the effectiveness of the brief therapy. The variables that were considered to be important measures of change are not uniform as they depend on the value given to them by the various purchasers of the EAP services and those receiving those services. This literature review first focuses on a brief examination of the roots and definitions of employee assistance programmes, to set the scene for the study which follows examining what criteria/values are used to evaluate the effectiveness of such services. Further, the main thrust of the counselling service as provided by EAPs is that the programmes offer normally only brief therapy. Hence it is important to establish what is meant by this concept and what has been found and said about the value of brief therapy.

The effectiveness of an EAP service will possibly be dependent on who uses it. Therefore this study also looked at how the effectiveness of the therapy offered varied, depending on demographic characteristics of the users. Thus this review explores what has been found with respect to demographic differences. Unfortunately there seems to be few good studies that really examine demographic differences in much detail.

One of the most important criteria for measuring the effectiveness of such a service, from a commercial point of view is whether the service is cost effective. This study aimed to examine this issue so this review, after setting the scene, looks at how this has been explored by others. The main thrust of the review therefore looks at what other studies have found with respect to the various measures of change, such as changes in psychological well-being (e.g. reductions in depression and anxiety and increases in self-esteem), increases in mental health/well being, job satisfaction/performance and stress.

A key focus of the present study was also to look at the effectiveness of the service in producing change in coping strategies of the clients, as this was seen as being the main focus of the work of the counsellors with their clients, so this review looked at what studies there have been that focussed on this area of change. Unfortunately, the amount of research into this area with respect to EAPs was limited, but what is explored is the

concept of coping and the difficulties researchers generally had in defining that concept and hence finding effective psychometric tools with which to measure coping strategies.

Finally this review looked at the conceptual theoretical model that underpinned the research and the research difficulties with respect to carrying out this research study within a naturalistic setting and thus the theoretical justification for accepting those difficulties.

2.2 EAPs - the roots

The origins of Employee Assistance Programs (EAPs) can be tied to efforts in the 1880s to eliminate alcohol from the workplace and were further stimulated by the liabilities created by workers' compensation laws. The development of EAPs, it has been argued, has passed through three distinct phases: occupational alcoholism programmes (1939-1962); broad-brush employee assistance programmes (1962-present) and occupational health promotion (1980s to present) (DeGroot and Kiker, 2003). Part of the development was also as a result of the various research studies that indicated that EAPs could save companies money while promoting the health of employees (Brody, 1988, Csiernik, 2004).

In Europe a number of factors prompted the rapid growth of EAPs. These included increased investment in staff (e.g. Investors in People Award started in 1993 by a section in the Department of Education and Employment) and increased pressures on staff due to organisational rationalisation leading to increased demands on employees and changes in their roles (Gammie, 1997). Probably more importantly the following has also contributed to an increase in EAP provision: the growing tendency from health and safety regulators and courts to recognise that the employer has a duty of care in relation to the workforce (Csiernik, 2005) (e.g. the Walker Case {Walker v Northumberland County Council, 1995}) and therefore to hold the employers responsible for the mental as well as physical health of their employees; the potential financial benefits (such as reductions in costs and insurance premiums) for the employers and the advantage of EAP provision in employee compensation claim cases (Hoskinson and Reddy, 1993). This growth is illustrated by the fact that by 2006 more than 1000 organisations in the UK made use of EAPs covering more than two million employees (around 10% of the UK working employee population) (EAP Association, 2006).

Although EAPs are seen as a humanitarian endeavour, the primary motive for their development has been economic. It is seen that there are considerable losses associated with absenteeism, increased health care utilization and other associated cost, which in the USA drives up health insurance, grievances and lost productivity. In the USA it was

suggested that 18% of the working population was losing 25% productivity due to personal problems that affect their jobs (Masi, 1984). Alcoholism was costing U.S industry more than \$20.6 billion in lost productivity (Royce, 1981). Stress related illness was responsible for an annual loss of 132 million working days, the national expenditure for mental health services account for 15% health expenditure (Feinstein and Brown, 1982).

Thus a survey of directors found that 83% believed cost saving represented an important criterion on which to evaluate EAP performance (Houts, 1991) and 87% of EAP practitioners saw the purpose of EAPs was to improve employee productivity, 69% felt it benefited both the employee and employer (McClellan and Miller 1988). Development of EAPs was influencing management that was changing independently of EAPs and EAPs were changing to adapt to changes in management styles (McClellan and McClellan, 1987). Instead of only traditional occupational alcoholism programs, EAPs were emphasising reduction in health risks/safety risks and wellness. EAPs were blending in health interventions and were broader than originally defined by Trice and Roman (1972). Highley and Cooper (Highley and Cooper, 1994a, Highley and Cooper 1996; Highley-Marchington and Cooper, 1997a, 1997b) outlined a number of potential individual and organisational benefits of EAPs. Individual benefits include improved mental well-being, increased job/life satisfaction and better functioning at work. Organisational benefits include improvements in work performance, morale, internal communication and personal relations, and reductions in sickness absence, staff turnover, accident rates and grievances; and also the provision of good external PR as employers are perceived to be caring. So in its present context EAPs need to be defined.

2.3 What is an EAP?

In American the 1990s brought new changes in EAPs provision with the rising costs of health care. There was a development towards managed care with EAPs becoming proactive with prevention being their primary goal i.e. treating employees' problems before more serious ones develop. In Britain a similar development ensued arising out of the need to reduce the costs of absenteeism and litigation.

Thus EAPs were provided as a package of services including free legal, financial and careers advice. However, the focus here is on the counselling part of such packages. An EAP that offers free counselling is a professional assessment, referral, and/or short-term (brief) counselling service offered to employees with alcohol, drug, or mental health/emotional/relationship problems that may be affecting their jobs. Employees are

either self referred or referred by supervisors. Eligible clients often include the employees' family members, including their significant others, and retirees.

Most EAPs offer sessions limited from between 3-8 session models with the aim of facilitating the resolution of a problem via brief therapy. Generally they have been provided to help with adaptation to change, to facilitate the reduction in stress, to support staff and to be seen as caring.

The counselling would normally involve an accurate assessment usually within the first two sessions followed by short-term treatment. This treatment involves brief therapy, focussing on a central theme, using problem-solving techniques and hopefully involves having a beginning, middle and an end to treatment.

McLeod (1993) describes the emergence of brief therapy as arising from social needs and client demands for shorter, problem-focused therapies. Given that most purchasers of mental health services (including individual clients as well managers of mental health services) have constraints of time and/or money, time-limited therapy is now the treatment of choice, and is becoming a quickly expanding option in mental health provision.

2.4 The effectiveness of brief therapy

Generally there is the assumption that brief therapy is twenty sessions or less (Koss and Siang, 1994), though it would be more accurate to assume that brief therapy is not so much about the number of sessions, but the establishment of a clear focus for the treatment and the orientation of the therapy can vary e.g. CBT, solution focused, marital therapy, etc. However, the model of brief therapy as used by EAPs is 3-8 sessions irrespective of the type of therapy used. Thus the question here is whether this number of sessions, i.e. the dose-effect, is effective in producing adequate change. The question of the dose-effect relationship in psychotherapy was first addressed by Howard et al. (1986). They studied 15 previously collected data sets to examine the relationship between the number of sessions that clients had received and the percentage of clients showing measurable change. Their analysis revealed a pattern of diminishing returns as the number of sessions increased, with 50% of patients having shown measurable improvement by 8 sessions whereas only 75% of patients had measurably improved by 26 sessions. In addition, they found that 15% of patients had measurably improved before attending the first session of therapy, thus highlighting the importance of taking into account the rate of spontaneous remission when estimating the benefit of therapy. Effective exposure was also measured and this was taken as the dosage of

therapy necessary for 50% of patients to show measurable improvement. The amount of therapy necessary for effective exposure was estimated as being between 6 and 8 sessions. However, it has been suggested that 12-20 sessions are necessary to effectively address severe problems in a way that produces enduring benefits (Lambert and Ogles, 2004), though Lambert and Ogles also reported that 5-10% of those receiving therapy deteriorated over the course of treatment.

Lueger and Howard (1994) supported the idea that work functioning can be improved with brief therapy, 25% improvement after 4 sessions, and 50% after 20 sessions. But the method of therapy was long-term and not a solution focus brief model. But this still raises the question whether the number of sessions affects the effectiveness. Cheeseman (1996) supported this idea in that in his study the maximum impact of counselling took place within the first four sessions. However, Parry, Shapiro and Firth (1986) suggested from their study that most change occurred in the first 8 sessions, whereas Rogers, McLeod and Sloboda (1995) suggested that those who received 5 sessions were more satisfied with the counselling. But this last study used no measure to examine whether satisfaction correlated with clinical improvement and whether satisfaction continued with time. Also the high proportion of missing data in many studies begs the question whether those who did not answer the questionnaire did not do so as they were dissatisfied with the counselling, and those who did return the forms tended to be those who were most satisfied with the service (Roger et al, 1995). In truth this question cannot be answered without asking those subjects why they did or did not fill out the post-counselling questionnaire. Similarly, Dickson and Roethlisberger (1966) found 10% of the employees were satisfied that the counselling had helped. Mitchie (1996) also said that in his study self-reporting satisfaction was high (90%) for users of an EAP and 73% reported it had helped or greatly helped the work performance. But in both these studies the difficulties were that no standardised and/or independent measures of change were used. Also, positive satisfaction data says little about effectiveness of the service. Such data indicates only willingness, on the part of the counsellor, to help but not about what the help was effective with.

Sloboda et al (1993) reported 92% rating the services as good to very good with the average number of sessions being a fairly constant number of 4 (also in Highley-Marchington and Cooper, 1998). But the majority of clients were male and younger employees, again there was a large amount of missing data and it still begs the question whether client satisfaction correlates with clinical improvements. Also there was an over

representation of the younger work force (25-44), younger clients may account for the greater job dissatisfaction (Kalleberg and Loscocco, 1983; Quinn et al, 1974).

Shapiro et al (1990 and 1994) reported significant effectiveness for both 8 and 16 session models and the type of therapy offered did not affect this difference, though the most severely depressed client's benefited more from 16 sessions, but 8 sessions were perfectly adequate for those with moderate to low severity levels of depression. Though the subjects were selected for the study and would not represent those choosing to come for counselling under an EAP program. Barkham and Shapiro (1990) showed clients having a reliable and clinically significant improvement after two sessions and up to 73% at 6 months follow-up. It is to be born in mind that most EAP brief therapy programmes allowed for up to six to eight sessions but the mean number of sessions for clients tends to be about 2.9 sessions (Shakespeare-Finch and Scully, 2004).

Clients and counsellors, in general, are consistently in agreement of the perceived effectiveness of time-limit counselling. Also, time limited therapy has been shown to be as effective as unlimited therapy (Malan, 1976; Sifneos, 1972) and for some researchers the greatest gains are found to be observed in the first 8 sessions regardless of who evaluates the treatment, client, therapist, observers or standardized measures, bearing in mind that self-reporting has been shown to fairly match objective criterion of effectiveness (Howard et al 1986; Lambert et al, 1986; Steenbarger, 1992). Further, Koss and Shiang's (1994) comprehensive review of brief therapy research found that no evidence exists to suggest that brief interventions produce any greater negative effects than long-term psychotherapy. Steenbarger (1992) concluded that the evidence concerning relapse during follow-up periods is mixed, therefore also not showing a particular advantage of either brief or long-term therapy (see also Cross et al., 1982; Hollon et al., 1991; Jacobson et al., 1988).

Brief therapy has been shown to benefit specific client populations who have specific problems but are otherwise functioning well. For example, brief therapy has been shown to be effective for the treatment of job-related stress (Barkham and Shapiro, 1990), anxiety disorders (Klosko et al., 1990) and depression (Dobson, 1989; Elkin et al., 1989). However, brief therapy has been found to be less effective for patients with more severe disorders such as substance abuse and psychosis (Koss and Shiang, 1994). Overall, Koss and Shiang (1994) concluded that comparative studies of brief and time-unlimited therapies show essentially no differences in results. Furthermore, Steenbarger (1992) concluded that numerous studies (e.g. Avnet, 1965; Chubb and Evans, 1990; Gelso and Johnson; 1983) have shown brief

interventions to be both efficient and effective, as they result in both positive outcomes and savings in agency time.

A number of studies have reported also that changes continue after the end of brief therapy. For example, Pollack et al. (1990) found patients with higher-level personality disorders categorised as DSM-III-R Cluster C (American Psychiatric Association, 1980, diagnosis of either compulsive, avoidant, dependent, passive-aggressive, or a mixed personality disorder) who had received brief therapy, maintained gains on follow-ups of one to four years and seemed to improve in terms of target complaints over this period. Steenbarger (1992) cited a study by Gelso and Johnson (1983) who also reported that college students who had received time-limited therapy furthered their gains 8 to 14 months after the end of therapy, suggesting that time-limited therapy may catalyse change after treatment. Thus changes gained during brief therapy seem to be maintained over time or improved upon, to the same extent as gains made during longer therapies (Johnson and Gelso, 1980; Koss and Butcher, 1986).

However a variety of variables can affect outcome with brief interventions. These include the quality of patient and therapist relationship; therapist variables; the presence of time limits (see Barkham et al., 1996); patient characteristics such as level of expectation and motivation to change; dispositional characteristics (diagnosis, interpersonal characteristics such as coping styles, ability to form relationships); environmental factors (social supports, work roles); expectations of therapy and initial severity of symptoms (Koss and Shiang, 1994; Steenbarger, 1992). Steenbarger (1992) states that a variety of outcome studies suggest that high levels of adjustment at the start of therapy are associated with the best outcomes and lowest levels of relapse (Elkin et al., 1989; Lelliott et al., 1987; Luborsky et al., 1990; Sloane et al., 1975). However, brief counselling outcomes are not linked to high functioning clients alone; for example, brief therapy has been shown to be effective with major depression (Gallagher-Thompson et al. 1990).

Thus, brief therapy is seen as effective if the client can form relationships, and client is well motivated, there is an absence of psychosis, severe depression or any other major disorders affecting the personality and needing reconstruction (Burlingame and Fuhrman, 1987; Lambert et al, 1986; Steenberger, 1992). Brief therapy is seen as successful by the above authors, where there is a history of successful social interactions; clearly defined problem of recent origin, high client motivation and self-awareness of the distress. It is seen as not being effective where there are difficulties in interpersonal functioning, deep seated chronic symptoms, little or no motivation, unable to make a therapeutic alliance, has

a psychosis, unwilling to engage and low self-awareness. Steenberger (1992) seems to show that brief therapy produces poor results for marital problems, depression and lack of confidence. This may also be because few counsellors have received specific training in the techniques of brief therapy. (Few present training courses offer training in brief therapy as an integral part of the course, from personal experience; most trainees must learn this on the placement, if such placements expect brief therapy as a model of working. This is odd given the demands of the health service and the need for brief therapy via EAPs). Notwithstanding its possible limitations, for most problems, counsellors and clients felt brief therapy was adequate or appropriate. Andersen and Lambert (1995) suggested that the differences in effect sizes reported were probably due to the differences in inclusion criteria and outcome measures used in the different reviews. Overall, Andersen and Lambert concluded that brief therapy is an effective treatment for a broad spectrum of outpatient problems. Thus brief therapy within EAPs is seen as effective with relatively well functioning individuals with a relative limited number of presenting problems, though its effectiveness may vary depending on those who use EAPs.

2.5 Who uses EAPs?

Traditionally it is seen that women are the greater users of psychological services and often services seem to favour referring the white female YAVIS clients (Young, Attractive, Verbal, Intelligent and Sociable) (Wright, 1992). So it is of interest to know whether those who access the EAP services follow the same pattern. The advantage that EAPs have is that they frequently eliminate the gate keeping that may, in other settings, prevent a wider group of people from accessing such services, though there seems to be various other factors that have some effect on utilisation. Several studies link knowledge, information or awareness of the EAP services to utilisation (Bennett and Lehman, 2001; Googins and Kurtz, 1981; Harlow, 1998; West and Reynolds, 1995) and the perception of confidentiality relates also to attitudes to EAPs and hence utilisation (Oher, 1993). Stigma associated with the use of counselling, and doubts over effectiveness, or negative stereotyping about the use of counselling can also affect utilisation rate (Butterworth, 2001; Gyllensten et al, 2005; Trubshaw and Dollard, 2001). Thus it could be expected that external providers would have an advantage in this respect, therefore they would expect to have higher utilisation rates. Straussner (1988) indeed found this to be the case, with utilisations rates for external providers to be 5.7% while internal provider were at 3.8%. However, the utilization rates demographically do appear to be different from what could be expected in other therapy settings.

Hall et al (1991); Harlow (1998) and May (1992) found that women more than men believed that EAPs were effective and were therefore more likely to use it. Belief in an EAP's efficacy affects the utilization for all groups (Delaney et al, 1998). Many studies suggested that women are more likely to use EAP/counselling than are their male co-workers (e.g. Asen and Colon, 1995; Blum and Roman, 1992; Braun and Novak, 1986; Brodzinsky and Goyer, 1987; Burke (1994); French et al, 1997; Grosch et al, 1996; Harlow, 1998; Poverny and Dodd, 2000; Whelan et al, 2002). Further, some suggested that women and younger employees were more likely to use the service (Macdonald et al, 1997). But others found male and younger employees were over-represented (Sloboda et al, 1993), though Milne et al (1994) and West and Reynolds (1995) found no gender or age difference in attitudes to counselling and Gerstein et al (1993) found no differences in ethnicity or gender in USA with respect to utilisation rates. It has also been found that men were just as likely as women to request help for depression. The research suggests that the role of gender cannot be assumed from trends in the general population (Coudriet et al, 1987). In relation to stress management programs, Bunce (1997) noted that, within research into the effectiveness of therapy, scant attention had been paid to the factors which influenced outcome, such as, individual differences (e.g. initial levels and type of strain, age and gender); a criticism which could equally be directed at employee counselling research.

Nevertheless, Braun and Novak (1986) found that non-users were over 50, men, highly stressed and in denial of their problems, self-reliant and would think that using EAP would look bad. Interestingly women use external EAP providers three times more than men but no gender differences were found within internal providers (Highley-Marchington and Cooper (1998). Overall it is suggested that there is no evidence of consistent trends regarding associations between differential EAP/counselling utilisation and other demographic characteristics, such as gender, age or job status (non-professional/professional) (Milne et al, 1994).

Further, with regard to utilization, French et al (1997) found that those with good health were more likely to use service than ones with health problems. Job satisfaction was found not to be related to utilisation and other demographic variables were not seen as predictors of utilization. Senior management was not likely to use it (Harlow, 1987). Overall there seems to be some disagreement over who are more likely to use an EAP service. However, from a review of the research it would seem that a wide range of employees benefit from an EAP service (McLeod, 2001 and 2007; Milne et al, 1994) in contrast with BOHRF (2005) where it was said that it was more likely that only white collar workers would

benefit rather than lower status employees. The differences here may relate more to the kind of brief therapy offered or how the service is communicated or offered to the employees or how or by whom referrals are made (Bennett and Lehman, 2001; Googins and Kurtz, 1981; Harlow, 1998, West and Reynolds, 1995). But to examine whether there are, for example, demographic differences with respect to what groups benefit most, it is important to decide how effectiveness can be measured.

2.6 Measuring EAP effectiveness

The main focus of this study was to investigate whether the brief therapy as provided by an EAP was cost effective and to ask if it was effective in promoting change in the recipients of such a service, what kind of change was most significantly produced?

The evaluation of counselling services in the workplace has been widely recognised as ‘an excellent means of ensuring that employee needs are being met, that the counselling service is fulfilling its aims and objectives; it can be used for forward planning and used to build in changes and modifications to counselling services’ (Carroll, 1996; 1997a; 1997b). However, currently, there is an additional impetus for evaluating services, accountability. As Cooper (1983) points out, EAP programs became increasingly accountable in terms of the benefits they could deliver to organisations. Consequently, almost every company with an EAP in the US was subjecting it to close scrutiny in terms of cost-benefit, utilisation and success rate (Bickerton, 1990). Employee counselling schemes could no longer ignore the issue of evaluation as they had to justify their existence to purchasers in order to survive. This trend has been followed in the UK as more companies adopt employee counselling schemes and many now use standard evaluation tools such as C.O.R.E (Clinical Outcome for Routine Evaluation). CORE IMS state they now have data on 25,000 clients who have used workplace counselling or EAPs (CORE IMS, 2008). But it is still hard to gain access to this data particularly regarding individual providers as this is seen as commercially sensitive.

When this study was carried out it was seen that there were a number of gaps in EAP evaluation. As Cayer and Perry (1988) pointed out, most research focused on private sector EAPs and was primarily descriptive or promotional without much rigor in evaluation methodology or design. In the public sector, there was even less written on EAPs, and almost no evaluation materials were available. In addition, Klarreich et al. (1985) also criticised the field for its lack of independent objective research, with almost all EAP research taking place within EAP provision, with the exception of the Kent study (Worrall, 1999). Furthermore, benefits were mainly described in testimonials or in cost-benefit terms, with individual

measures mainly focusing on client satisfaction until more recently when the use of C.O.R.E. has become more established.

This study sought to independently evaluate an EAP service using various tools to measure objectively the process of change and to see how clinically significant that change might be. But commercially, much interest, when examining effectiveness, is focussed on whether the EAPs service is cost-effective in producing that, hopefully, clinically significant change.

There are many ways to measure the effectiveness of an EAP and below it is proposed to look at the literature relating to a number of dimensions of effectiveness which the study proposed to examine. Firstly, it is proposed to examine what has been found concerning the cost effectiveness of such services in monetary terms, then to discuss how EAPs may reduce sickness levels which in turn would also be a saving to the organisation by reducing lost productivity. However, from a therapist point of view, it is of more interest to know how effective EAP services may be in producing psychological change, such as effecting reductions in levels of depression, anxiety and raising self-esteem. Further it is also of interest to know how effective such services may be in increasing job satisfaction/performance, reducing stress, improving mental health/well-being and effecting improvements in coping strategies.

2.7 Is it cost effective?

There are never enough resources to satisfy human wants completely thus with competing treatments within mental health, services require some economic evaluation sometimes known as a cost-effective analysis. This will compare different methods of treatment. It is a useful approach where there is one clear objective of health care intervention such as extending life, but this presents difficulties where there might be multitude objectives e.g. improving length and quality of life both of which may not be mutually exclusive i.e. extending life may not improve the quality of that life.

Evaluating cost by carrying out a cost-utility and cost benefit analyses on the treatment is one way to examine the process. Some treatments may act as a saving in health care costs. This may be straight forward in some cases, but how do we evaluate the reduction of depression and improvement in quality of life for the individual and/or their families, the so-called intangibles? In other medical fields some cost analyses concentrate on measuring the benefits in easy money terms, or use the 'Human Capital' approach to valuing life and this is considered equal to the future earnings of the individual but other economists find

this an unsound, even as a minimum estimate of the value of life concept (Drummond, 1990). Cost utility analyses look at states of health being valued not in money terms but relative to other states of health. The trouble is that many EAP purchasers are sometimes not knowledgeable enough or interested enough to distinguish between the counselling quality used by different providers so buy the cheapest service rather than one of value (Hopkins, 1998). Thus the concept of health promotion is popular in many corporations but there's little concern on the part of sponsoring firms for measuring the effectiveness of their programmes particularly whether it is cost effective (Katzman and Smith, 1989). However, while some studies may indeed measure effectiveness in terms of reduction in costs, others look at the effectiveness with respect to symptom reduction. Some studies still primarily focus on reduction of sickness levels as an indicator of symptom reduction as this offers the opportunity for making clearer monetary saving statements.

To examine the cost effectiveness of EAPs, the role of EAPs has to be put into context. It was said, for example, in 2007 to 2008, that in Britain work related stress accounted for over a third of all new incidences of ill health; that each case of work related stress, depression or anxiety related ill health lead to an average of 30.6 working days lost and that 13.5 million working days/year were lost due to stress costing approx £4bn (HSE, 2009). The annual cost of replacing employees under performing due to stress was estimated in 1988 at £3bn, or over £100 on average per member of Britain's workforce (CBI Conference, 1992). The annual cost of sickness absence caused by alcohol abuse was estimated in 1989 at £700m equivalent to about £23 per member of Britain workforce (Dept of Health, 1993 in CBI Conference notes, 1993). Further it was estimated that stress-related sick leave was costing the UK economy £93 billion every year (The Mental Health Foundation, 2005). The annual cost of mental health problems to British industry was estimated in 1992 at £3.5Bn or about £117 on average per member of Britain's workforce (MIND, 1993). Kearns (1986) has suggested that up to 60% of all work absence is caused by stress-related disorders (and of that, 71% of the stress is seen as work related {Cooper and Davidson, 1982}).

For some an EAP success rate can be measured by number of clients x average salary x % of job deterioration x success rate of 80% = cost effectiveness (Ahn and Karris (1989) (the 80% was probably somewhat over optimistic). This assumes equivalent distribution of salary rates and all problems are weighted the same. By not recognising difference, critical factor are lost. Ahn and Karris also examined the cost benefits by taking into account the severity of the problems. So some employers believe that it is less costly to identify and

deal with problems early than to allow these to run unchecked. EAP costing £33 per person per year would only need to save 4.9% of cost of sickness if absenteeism is costing them £672 at an average of 4 days sickness per year on an average salary of £24,000 (Gammie, 1997). Overall, Masi (1984) estimated that “EAPs average a 3:1 return on the dollar”; others give similar ratios of 2.7:1 (Klarreich et al, 1987) or 1.5: 1 (Bruhnsen, 1989) or 2:1 (Dainas and Marks, 2000) or at least 1:1 i.e. paying for itself (Blaze-Temple and Howat, 1997). Thus, a review 39 EAP cost evaluations published in 1990 gave cost-benefit ratios ranging from cost neutral to 7:1 (Csiernik, 2004). Other studies showed that there were some who have not reported savings with the use of EAPs e.g., McClellan’s (1989) evaluation of the Ohio State EAP found no reduction of health insurance costs, sickness or employee turnover. Masi and Goff’s (1987) evaluation of an employee counselling service program for the US Department of Health used three different evaluation methods (process, impact and outcome evaluation methods) and found reductions in costs in terms of sick leave, leave without pay, administrative leave and absence without leave. Feldman’s (1991) evaluation of the EAP for General Motors reported that the program saved the company \$37 million per year. The Paul Revere Life Insurance Company also reported making a saving of \$4.23 for every dollar spent on its EAP program (Intindola, 1991). The difficulty with cost evaluation is that the majority (98%) in a survey of EAP directors in the USA believed that EAP produced moderate to high cost-savings but only 40% collected any cost saving data (Houts,1991).

When selling an EAP, the arguments put forward were often around that the service is cost effective in terms of the benefits it may provide to the personnel in terms of, for example, their occupational health. The difficulties are around finding tools which will provide acceptable economic measures of costs and the savings accrued by providing therapy to the employees. However it does seem that studies that carry out rigorous examinations of the economics involved seem to show that work place counselling via EAPs, pay for themselves in terms of the savings generated for the employers, especially external providers, but higher cost EAPs would seem to provide a more accessible service shown by higher utilization rates which would seem to suggest that they were more cost-effective (Brody, 1988; Collins, 1998; Straussner, 1988). But one of the most obvious measures of the effectiveness would be to examine if the service was effective in reducing sickness levels, as a reduction in this would, theoretically, provide a cost saving to the organisation in the proportionate increase in productivity.

2.8 Reduction in sickness levels

EAPs are said to produce 30-60% fewer accidents; 33% - 52% decrease in sick days or 43%- 50% reduction in absenteeism in the USA (Jerrell and Rightmyer, 1982). There is some difficulty when comparing EAPs in USA, as different EAPs have different goals and therefore different outcome measures (Kurtz, Googins and Howard, 1984). The problem is that very little research results into EAP are from experiments that were truly experimental with control groups and random assignment of employees to treatment (Kurtz et al, 1984; Roman and Trice, 1976; Williams and Tramontana, 1976).

However, a number of studies seem to indicate that EAPs are effective in reducing sickness levels (Chandler et al, 1988; Cooper and Sadri, 1991; Elliot and Williams, 2002; Gam et al, 1986; Gersons et al, 2000; Goss and Mearns, 1997; Guppy and Marsden, 1997; Mitchie, 1997; Nadolski and Sandonato, 1987; Rost et al, 2004; Rost et al, 2005; Selvik et al, 2004; Van der Klink et al, 2003). Some examined the reduction of absenteeism and turnover (Ahn and Karris, 1989; Blaze-Temple and Howat, 1997; Bruhnsen, 1989; Klarreich et al, 1987). These studies generally found that sickness absence rates in employees seeking counselling were much higher than rates in matched samples of employees in the months prior to entering counselling. Typically, counselling reduced sickness absence by 20% to 60% with these gains being maintained over a one year period. However, the sickness absence rates of the client population remained slightly higher than those of matched control employees, following counselling. But as many of these studies were in USA or Australia the results perhaps have limited value in a UK context, as EAP counselling services in the UK differ in focus and structure to those in the USA and the cost of medical insurance is a factor in the measurement of cost effectiveness in the States but is not an issue in this country.

But in the UK, Cooper et al (1990) did find that sickness absences and days off both were reduced significantly in a study involving a large public sector service. In another study by Cooper and Sadri, (1991) they found absence remained constant for the control groups but reduced by more than half in the client group. Goss and Mearns (1997) found that sickness absence for six month period following counselling had improved by 62%. Mitchie (1996) found 44% improvement in absenteeism, whilst in Worrall's (1999) study found only moderate reductions in sickness levels and GP visits. Interestingly Rost et al (2005) found that those who received psychotherapy only reported 26% reduction in absenteeism while those on medication or a combination of medication and psychotherapy showed minimal decrease in sickness levels. While generally speaking the results into the

effectiveness of workplace counselling seem to compare well with those carried out in other settings, Lambert and Bergin (1994) commented that some of the most substantial changes that have been recorded in the area of behaviour were reductions in sickness levels rather than changes in reporting symptoms.

However, Saroja et al (1999) suggested that psychological help has differing affects on short-term and long-term absenteeism. The difficulty here was that it was not clear about the type of interventions used and how willing the subject might have been. This problem with respect to comparisons of treatments may account for some studies producing opposite effects. Thus, Macdonald, Lothian and Wells (1997) found that while 69% EAP users report their quality of life had improved and 46% said their work performance had gone up, their sickness levels also rose as compared with a control group. In Alker's study (2000), using a small population, found that sickness absences increased post counselling. Reynolds (1997) found 80% showed significant improvement after counselling in depression scales but no changes in absenteeism or job satisfaction. Highley-Marchington and Cooper (1998) found that well-being improved in counselling group but there was no improvement or reduction in sickness absence/events as compared with the control group. It is perhaps well to consider that the sickness levels of those coming for counselling would tend to be higher than any control or normative group (i.e. as compared with the general population which the counselling sample were coming from) (McLeod, 2001 and 2007). Further, it may be that measuring reduction in sickness absence is not a very good method for measuring the effectiveness of an EAP service, as for a start, it does not take into account the concept of 'presenteeism' where a worker may stay at work but their productivity is low due to stress and its related psychological problems. Thus measuring psychological change would perhaps be seen as a better method for showing the effectiveness of the brief therapy within the EAP service.

2.9 Effectiveness with respect to psychological change

Many studies show significant satisfaction with respect to perceived benefit from EAP e.g. improved work performance or helped them with their concerns and would recommend it to others (e.g. McClellan, 1989; Park, 1992). However, the more important question with respect to work place counselling is not so much whether it is found to be helpful, as the above studies seem to show that most of the EAP clients do find it helpful in some way, but what does it work best with. Some studies have shown that work-related counselling can have a positive impact on psychological symptoms (e.g., Firth and Shapiro, 1986; Gardner et al, 2000; Harris et al, 2002; Selvik et al, 2004.). Barkham et al (1999) using a

two plus one approach on 116 clients, where they received two sessions one week apart and another 3 months later, seem to show that the therapy was effective for all groups and at one year follow-up, clinically significant improvements were found in 67% of the stressed clients, 72% of the sub-clinical clients and 65% of the low-level clinically depressed clients. It is interesting to note that it is not clear whether the improvements were immediate and maintained in the year follow-up or that a year of consolidation was needed to register the improvements.

Barkham et al's study also noted that one form of the intervention did not produce any more effective results than another form of therapy (e.g. psychodynamic v. interpersonal) (see also Shapiro and Firth, 1987; Shapiro et al, 1994). This is seen as important as many studies including this present one, may use a variety of counsellors who may have been trained by devotees of differing schools of therapy. Further, other studies have shown that while therapist's theoretical bases may be very different, there is a great difference between what they say they do and what they actually do, and what they actually do may not be that different (Lambert, Shapiro and Bergin, 1986; Stiles, Shapiro and Elliot, 1986). It is of some interest, however, that the study that reported by far the highest rate of effectiveness (Gersons et al, 2000) developed a treatment package that was designed to meet the needs of a specific group of clients and which drew upon several theoretical traditions.

Notwithstanding this, and acknowledging the above studies showing the positive impact on psychological health, it is more important to know with what specific psychological problems does brief therapy through an EAP service work best with.

2.10 Changes in depression, anxiety and levels of self-esteem

Various reviews of EAP provision show that there is enough evidence to suggest that EAP counselling can claim a reasonable level of effectiveness in assisting clients to deal with stress, anxiety and depression (Csiernik, 2004; DeGroot and Kiker, 2003; McLeod, 2001). Cooper et al, (1990) found that those coming for counselling at intake had scores for anxiety, depression and somatic complaints at levels much higher than a normative sample of UK workers and at post counselling, these clients showed significant improvement in these problems and also in their levels of self-esteem.

Cooper and Sadri, (1991) also found 60% of the clients seeking counselling showed significant improvements, which included positive changes in anxiety/depression and

health behaviour (e.g. use of alcohol and coffee). Mitchie (1996) found significant improvements in anxiety and depression with clients treated with stress management counselling. Parry, Shapiro and Firth (1986) saw from their study that a group who did not take up the offer of counselling but knew it was on offer, improved in mental health and somatic symptoms, but this could have been explained by the improvement of those who were more depressed in the group and who received counselling returning in a better positive state and influencing the mood of the group. But those in a control group who were not offered counselling deteriorated in mental health over the same time period. Sprang (1992) compared those who stayed with the counselling and those who dropped out, both started with similar scores but those who received counselling improve in the measures for depression (BDI) to within the normal range. The difficulty was that it was not apparent if the “control” group was examined after the treatment period for the other group. Goss and Mearns (1997) reported 65% of their cohort had improved with counselling. There was a significant positive change in self-esteem improved by 62% in the 6 months following counselling. Problems are that the study was based on client satisfaction responses and not on what had changed other than self-esteem measures and that many clients did not complete the questionnaires. A number of studies reported positive outcomes in relation to the impact of workplace counselling on depression and anxiety (Barkham et al, 1999; Harris et al, 2002; Grime, 2004; Hargrave and Hiatt, 2004; Iwi et al, 1998; Reynolds, 1997; Shapiro et al, 1990; Sprang, 1992), though Steenberger (1992) found poor results with respect to positive changes in depression. Whereas, Reynolds (1997) found 80% showed significant improvement after counselling in depression scales and more importantly some have found that the improvements in relations to depressive symptoms were maintained after one or two years (Barkham et al, 1999 {more so with cognitive-behavioural intervention}; Shapiro and Firth-Cozens, 1990). The question then is whether, if work place counselling (EAPs) reduces such things as depression and anxiety, do these positive changes have a direct effect on the employees’ job satisfaction and/or work performance?

2.11 Changes in job satisfaction/performance

It would seem that the hopes of many EAPs that they would facilitate better work performance by increasing job satisfaction do not seem to be met. For example, as suggested above, Reynolds (1997) found 80% showed significant improvement after counselling in depression scales but no changes job satisfaction. Cooper et al, (1990) also found no change in job satisfaction and a significant decrease in organisational commitment, (possibly in keeping with present government’s campaign for work/life

balance where the workers may have discovered the importance of other priorities in their lives in order to maintain a balance between their private lives and their work). Others also found no change in job satisfaction, (e.g. Highley and Cooper, 1995; Highley-Marchington and Cooper, 1998; Iwi et al, 1998; Kalleberg and Losocco, 1983; Macdonald et al, 1997; Millar, 2002; Mitchie, 1996; Philips, 2004; Quinn et al, 1974; Reynolds, 1997; Whelan et al, 2002). These last two studies had an over representation of a younger work force (25-40) who, it was reflected, might be expected to have more job dissatisfaction. Highley-Marchington and Cooper, found no significant differences between pre- and post scores in job satisfaction, and this did not alter in the follow-up. However, only 58% of the sample completed post-counselling questionnaires and only 16% responded for the follow-up. Thus many of the studies seem to show no link between EAP and job satisfaction. Nevertheless, Worrall, (1999) did find significant difference in work functioning, but of course the question that needs to be asked is, 'Do improvements in work functioning equate with improvements in job satisfaction or is this, a completely different measure?' Firth and Shapiro (1986) found 60 per cent of their researched clients improved significantly on work related factors. One important work related factor that clients would need help in reducing would be to do with work stress.

2.12 Reduction in stress

One of the basic tenants of the provision of EAP counselling services is that it can help employees learn to deal with stress more effectively and to therefore feel less stressed. However, some research suggests that this may not be the case. Highley-Marchington and Cooper, (1998) found no significant differences between the pre and post work stress scores and that this did not alter in the follow-up (also Cooper et al, 1990). Iwi et al (1998) also found no change with their measure of stress. However, the Sheffield studies did tend to show improvements in stress, but these studies, like many others, suffer from the lack of controls groups arising out of the ethical issues that having control groups might present (Barkham and Shapiro, 1990; Barkham et al, 1999; Shapiro et al, 1990). Gray-Toft (1980) found modest but statistically significant changes in the total stress. But this study did not carry out any follow-up so it is not clear whether this change was sustained over time. Meier (2002) found no significant changes in OSI scores (Occupational Stress Indicator). The review of 48 studies carried out by Van der Klinket al, (2001 and 2003) found that individual-orientated interventions were effective, and were more effective than organizational-level stress reduction programmes. Increase in total stress was related to reduction in satisfaction with co-workers and domestic stress was associated with reduction in job satisfaction, (Ramanathan, 1990).

Some organizations have sought to reduce stress by having enhanced levels of stress management using a system wide holistic approach involving 4 stages: 1. a stress audit; 2. Recognition of the locations of stress; 3. Training; and 4. Evaluation (McHugh and Brennan, 1992). Stress management programs have been seen by employers and employees as the highest program priority, but many packaged programs do not seem to be cost or health effective (Pelletier and Lutz, 1988). 1 in 9 only reported objective evaluation evidence of improved stress management by employees. This suggests individualised programs with targeted participants are more effective than packaged worksite programs (Steffy et al, 1986). Further, a reduction in stress, it is suggested will lead to better mental health and general well-being.

2.13 Improvements in mental health and ‘Well-being’

Highley-Marchington and Cooper (1998) and Highley and Cooper (1995) found significant differences between pre-post score for mental and physical health and well-being, and this persisted at follow-up as compared with the control groups. Worrall (1999) also found this in that 46% had significantly changed with respect to their well-being and mental health. In another study by Cooper and Sadri (1991) 60% of the clients seeking counselling showed a significant improvement in mental health, and which included positive changes in health behaviour (e.g. use of alcohol). Macdonald, Lothian and Wells (1997) found that 69% EAP users report their quality of life had improved and Firth and Shapiro (1986) also found that 60 per cent clients improved significantly in mental health, with significant positive changes in anxiety, somatic symptoms and depression. All the above research seems to indicate that EAP counselling produces changes in symptom relief and sense of well-being and not in changes in social/life functioning including work performance. The issue here may be that while such things as work satisfaction may not improve the client's job satisfaction, it may be able to improve on their mental health by reducing their perception of the stressors i.e. their experience of stress by changes in their coping strategies.

2.14 Improvements in coping strategies

It is of interest to note that much of the work involved in brief therapy particularly that which is offered within EAPs, concentrates on helping clients look at ways they think about a particular situation or problem and getting them to try to perceive it differently (Cognitive Behaviour Therapy {CBT}) and/or to take more appropriate actions to resolve the problem/problems (solution/problem focussed therapy). In other words, brief therapy

aims to help clients look at and change, their coping strategies, for dealing with stress, yet there seems to have been little interest in examining the clients' changes in coping strategies within the research around EAPs. The reasons may lie in the difficulties in finding useful tools with which to examine this, and this in turn may be because it has been difficult to date to find agreement with respect to defining the concept of coping.

Coping with difficulties may include a variety of actions and thoughts to deal with diverse person-environment interactions. Coping is not seen as a homogeneous concept but has to be seen in terms of strategies involving tactics, response cognitions or behaviour and can be noticed introspectively by observation. Individuals may favour particular ways of coping with familiar situations (learnt responses) and may endeavour to use those ways even in less familiar or unfamiliar situations as being the response tools they have in their repertoire. But these learnt ways may become a problem when they are no longer serving the individual well or at all. Then in the nature of being creatures that are required to learn, adapt and change to survive, the individual needs to learn new ways to cope with novel situations. For some, this may be difficult and hence may need the help of a therapist. Thus coping involves learnt models/strategies, perceptions of the situation and coping efforts. This involves multi-level processing and therefore needs multi-level instruments to measure it (Laux and Weber, 1993; Perrez and Reicherts, 1992).

However, to research into coping strategies there is a need to try to define the concept. Lazarus (1991) defined it as, 'cognitive and behavioural efforts to manage specific external or internal demands (and conflicts between them) that are appraised as taxing or exceeding the resources of a person'. However Lazarus noted that it was somewhat difficult to distinguish between cognitive appraisal of a situation and coping, as he observed, 'coping refers to what a person thinks or does to try to manage an emotional encounter and appraisal is an evaluation of what might be thought or done in that encounter', and this view is in support of his perception that coping relates to transactional phenomenological stress theory, i.e. a person's experience of stress is not necessarily in the situation itself but in their perceptions and processing of that situation. Thus, a situation may be stressful for one person but manageable or enjoyable to another (e.g. riding a roller-coaster!). Further, coping, as such, may need to be separated from coping resources, but this may be difficult as, for example, coping strategies may be dependent on resources available, such as the availability of social networks/supports. Therapy may involve therefore, focussing on, not only the coping strategies, but helping the client expand on their resources.

The issue here is that coping is a complex concept, and therefore it seems, has been difficult for researchers to find an agreed tool for measuring it. Many of the more helpful tools have their roots in the concept of coping that was formulated by Lazarus and Folkman (1984), who discriminated between problem focussed (action centred, often the focus of solution focussed therapy) and emotion-focused (strategies which do not change the actual situation but assign new meaning to it, not passive but require internal restructuring and may take some effort, often the focus of cognitive behaviour therapy).

Following Lazarus and Folkman there have been many attempts to conceptualise coping dimensions in order to find some form of psychometric testing. Often this involved devising factors (questions) and then from the data grouping them into categories and sub-categories of responses through factor analyses. Examples of these are: Klauer, Filipp and Ferring (1989) who formulated eight coping strategies with three main categories of focus of attention, sociability and response level, all with subcategories; the Miller Behavioural Style Scale; Monitoring and Blunting, with eight coping responses (Miller, 1987; Miller, Combs and Kraus, 1993) and Krohne's two dimensional coping strategies of vigilance and cognitive avoidance (Krohne, Schumacher and Egloff, 1992; Krohne, 1993). However, prior to these Lazarus, Billings and Moos used the concepts of problem focused and emotion focused coping instead of 'function' and formulated three forms; appraisal focused; problem focused (information seeking and problem solving); emotion focused (affective regulation and emotional discharge) (Billings and Moos, 1981). Carver et al (1989) used a similar orientation but felt the concepts of problem and emotion foci as being too simple and added therefore five subcategories to each. This was seen as more rational but was not validated by factor analyses. However, the last two seemed to conform to the current measures but were seen as having empirically too many internal inconsistencies (Schwarzer and Schwarzer, 1996).

Thus over the last twenty years various scales have been formulated to try to find a way of measuring coping. Lazarus formulated the 'Ways of Coping' questionnaire, with 8 scales but this was seen as having the general problem that coping measures change from stressor to stressor and sample to sample as it did not resolve the personal perception differences and situational issues (Parker and Endler, 1992). Thus McCrae and Costa (1986) favoured a situational-specific approach producing 28 scales where they tried to address the relationship between coping and coping appraisal, but their scale suffered from methodological limitations in that being situationally specific it would not be adaptable to the wide range of situations needing to be examined in the real world.

Many of the other measures seemed to begin to focus on similar areas so hence reflect a consensus of the facets of coping. For example, the Coping Strategy Indicator (Amirkhan, 1990) found three factors of problem solving, seeking support and avoidance. This was found not to be theoretically or empirically convincing. Life Situations Inventory (Feifel and Strack, 1989), but this was not seen as being useful, as indicated above, as in real life stressful situations do not reflect the individual's perception or experience of stress and thus their coping differences. What was needed was a matching of situations and behaviour with coping styles. Coping Inventory for Stressful Situations (Endler and Parker, 1990a, 1990b) also used three factors which were task, emotion and avoidance orientated coping strategies with avoidance being divided into distraction and social diversion scales (or avoidance withdrawal and avoidance-distraction (Ager and Maclaren, 1998). This last possibly suffered for being only disposition orientated and not situation orientated and did not have adequate psychometric support (Scharzer and Schwarzer, 1996). Thus in sum all the scales and measure suffered trying to resolve the complexity of coping with respect to: dispositional versus situational complexity in coping assessment; real-life versus hypothetical scenarios design methods; multi-dimensionality versus hierarchy modelling and social versus non-social constructs of the concept of coping. (Filipp et al, 1993; Klauer et al, 1989).

Notwithstanding these problems, as suggested above, the therapist's work in the brief therapy offered within an EAP will, more often than not, focuses on facilitating the client's ability to change their coping strategies for dealing with their stresses particularly with respect to that which they experience within their jobs. Thus it was felt important to examine the changes in coping strategies used by the clients as a result of the therapy and how these changes reflect on their experience of stress, anxiety, depression or general mental health as it has been found, for example, that problem solving coping strategies are a significant negative predictor of both anxiety and depression (Sprangenberg and Campbell, 1999). Also, Cheeseman (1996) in a small study, found that there were positive changes in relationship problems and coping strategies, particularly with respect to the use of social support and rational reflection. However this study must be viewed with reservation because of the high number of clients who did not respond to feedback questionnaire. In another study 74% felt counselling had not resolved the problem but had helped them to cope with it better (Highley and Cooper, 1995). Alker (2000) found only a marginal shift in the coping mechanisms in the direction of a more pro-active coping strategy. It seems that a relatively small number in the study felt counselling had helped to

solve their problems (15%) but 76% felt that while the problem had not been resolved they could cope with it much better. In one study, employees who had received help with learning different coping strategies involving stress management and lifestyle issues were helped to return to work sooner and had less recurrences of sickness absence (Van der Klink et al, 2003). Subjects with deficient social networks were found likely to experience events more stressfully than those with high social support networks, (Maynard, 1986; Van Dierendonck et al, 1998). Using social networks as a coping strategy as shown in this last study, rather underlines the relationship between the experiences of stress and coping strategies.

Thus it can be seen that the examination of coping strategies is important in researching the effectiveness of the brief therapy within EAPs but it is hard to find a tool that meets all the requirements of research and has empirical and face validity. The scale measuring coping strategies used in this study was taken from a large study on stress amongst health workers and was derived from the basic structure as formulated by Lazarus and Folkman. But this scale formulated six factors (rational actions; palliative response; social support; depressive, emotive and passive responses) as derived from factor analysis, and it focused on responses as opposed to appraisal in order to measure the change process (Hammond et al, 1992). The appraisal of the situation can be seen as being addressed via the respondents' subjective responses to the work stress measure (a reduced OSI {Occupational Stress Inventory} scale). Though this tool will have similar limitation to those discussed above, the reasons for those limitations can be seen both in the difficulties in defining such a multidimensional concept as coping, and therefore in designing a tool with which to measure such a concept, but also in the difficulties that definition and design make in the methodology or application of such designs within research. However, the difficulties or limitations of the design model used in this research are accepted as part of the conceptual and theoretical model that underpins this research so this model now needs to be clarified.

2.15 Conceptual and theoretical framework of the study

The discussion of the literature provided above, has been informed by a set of theoretical and epistemological principles. These ideas, which have been strongly influenced by the work of Fishman (1999) and Polkinghorne (1992), are briefly summarised in this section. The approach used for the development of the methodology of this research starts from a criticism mainly of the modernist concept of logical positivism which has dominated much

of the scientific research base and Anglo-American philosophy since the 1930s. The position taken by logical positivism was that all knowledge was to be found in the basic sensory experiences and was linked to symbolic and natural science. Basically this suggested that all scientific knowledge would aid progress in the social, political and economic fields. Positivistic science is based on the idea that the truth of a statement or concept is the degree to which it is a correct reflection of the objective external reality defined by a few elegant discoverable general laws e.g., Newton's laws of physics, or in psychology the laws of behavioural conditioning (Bandura, 1969; Pavlov, 1927; Skinner, 1953). However, one of the problems with positivism was that it viewed or views individuals as passive recipients of stimuli which govern behaviour mechanistically and hence there is a denial of free-will, intentionality and human purposiveness. Although logical positivism was highly influential in Britain and America, in Europe other views were developing such as existential philosophy which focussed on emotions and experience rather than rationality and objectivity, and acknowledged anxieties about modern life rather than the search for certain truth. But more importantly in Europe a philosophical tradition of 'Methodological and Critical hermeneutics' was being developed, which argued that fact cannot be separated from values; and detail from context, observation and theory, that is they saw the role of interpretation as being intimately linked to the values, morals and ideologies of society. The natural and human sciences thus cannot hold a monopoly of the truth with reference to the true nature of behaviour, every perspective or so called truths are just different glasses viewing the world providing different pictures which change when the glasses are changed (Fishman, 1999; Rorty, 1991). Thus, truth does not correspond to objective reality since reality is in a constant state of flux.

Existential and critical theory attacks modernism as being dehumanising, denying the roles of individual freedoms or creativity. These former theories see conscious experience as an integration of emotions, impulse and desires, not as separate entities. These theories take a view that basically all knowledge involves an essential element of participation of the observing subject (Wilkinson, 2009), the subject being the experimenter(s) or investigator(s) who cannot make statements concerning an objective reality as their interpretations are limited by their senses. Thus it is seen that the achievement of scientific knowledge is completely and systematically contextual, e.g., the historical context at the time of the observation, the state of the discipline and the perceived philosophies concerning knowledge at the time. From this view point the goal of science from the modernist perspective is severely limited by the phenomenological world of the

individual's consciousness and this is restricted by the historical and cultural contexts. Positivist-modernist methodologies are also limited in that they are based on the concept that there are some basic scientific truths or scientific paradigms (Kuhn, 1962) from which deduced theoretical principles or webs of beliefs can be derived (Feyerabend, 1975; Quine, 1981). By contrast, existential theory takes a more pragmatic perspective.

From the pragmatist point of view the world consists of unlimited variety, change and novelty, the knowledge of which consists of contextually limited guidelines and not general rules, thus emphasising the tentativeness, fallibility and incompleteness of any knowledge (Dewey, 1910; James, 1955). Pragmatism sees no single underlying foundational perspective that has a unique claim on the truth. However, while pragmatism, particularly pragmatic relativism holds there is no ultimate or foundational objective truth, as if there was, how would anyone know, limited as man is to his senses, it still holds that some statements could be made at certain times about certain social groups, societies etc from certain perspectives that can be helpful in meeting human needs but are not statements of fundamental reality (Rorty, 1979). Thus the pragmatic truth perspective serves to help us cope, solve problems and achieve goals of today's world.

The development of psychology is seen as a progressive accumulation of modernist knowledge about human behaviour (Boring, 1950). Psychologists felt linking their subject to science helped in enhancing its public status and hence financial support, so research in psychology opted to follow the scientific methodological system of research. Academic psychology followed this modernistic paradigm by focussing on the discovery of general laws of human behaviour. The modernist assumed that there is a logical and ordered universe, and science had only to discover the laws governing this order. The modernist hoped to produce a body of knowledge that would provide for prediction and control of human behaviour. They saw that underneath the apparent unpredictableness of human behaviour lay consistent laws which determined how humans would respond to various stimuli (e.g. behavioural psychology). The modernists' search for general laws of nature is seen as a doomed enterprise, however, the process of natural science which encourages openness to new experiences and empirical data is still useful in deriving pragmatically useful knowledge. Thus the modernist use of scientific methodology can still serve the pragmatist or postmodernist.

Nevertheless, the modernist perspective in psychology has led to a form of division of labour where the academic is engaged in the development/research into the discovery of

the basic laws and knowledge, and the practitioners are left to apply that body of knowledge (e.g. CBT), and the role of the practitioners is seen as just needing to keep themselves up-to-date with the latest findings and to use these as a guide to their practice (Peterson, 1991). However, research has shown that there is little utilization of research by practitioners and that practitioners use mostly their on-going experience with client (Barlow et al, 1984; Cohen et al, 1986; Morrow-Bradley and Elliot, 1986). There maybe a good reason for this in that when the academics have taken on the modernist view of psychology and aimed to mimic the other sciences in endeavouring to find the basic principle laws which govern human behaviour, their findings have been so refined (controlled) and disconnected from the world of the practitioner that the practitioner chooses to develop knowledge evolved from practice. This knowledge is built from constructions derived from cognitive schemes and interactions with the environment and it becomes pragmatic if it accomplishes the task and is not derived from an approved set of rules. Positivist psychology projects start with general theory to be confirmed, pragmatic psychological projects start with a specific practical problem to be solved (Fishman, 1999). Thus Toulmin calls for a redirection of enlightenment-inspired modernistic science away from 'pure' theory and technology towards applications to humanistically relevant goals (Toulmin, 1990).

This knowledge derived from practice is an illustration of the post-modernist view of knowledge and its development is a direct result of the failure of the modernist philosophical view of the world. The post-modernist emphasises foundationlessness, fragmentariness, constructivism, discontinuity, chaos, diversity and neopragmatism (Harvey, 1989; Rorty, 1979). This view sees that reality is not a single integrative system but fragmented and knowledge should be concerned with local specific occurrences and not with a search for context free general laws (Gergen, 1991) as context free general laws cannot exist. Thus it is seen that psychological reality is a view or perspective which is distorted, so psychological knowledge is foundationless (Polkinghorne, 1992). Postmodernist see that human knowledge is a construct built from cognitive processes operating mostly out of awareness, and embodies interactions with the world of material objects, other and self giving rise to meaningful interpretations of the real. This is known as constructivism. The postmodernist tells us that human problems and goals are not a 'given' by the natural world but represent purpose, intentions, desires, interests and values of individuals and groups who will always show differences and conflicts (Polkinghorne, 1992). In understanding human behaviour there is the constant wrestling with situations which involves the understanding of multiple frames of references which involve

inherently paradoxically cross-grained multiplicitous, multiversal aspects of human behaviour. Thus, from example, when working with a client it is not possible to separate the verbal and non-verbal communication as within verbal communication there are non-verbal communication and visa versa both of which are bound within the particular context and much of which is processed at the sub-conscious level.

The neopragmatist see that context free general laws cannot exist as there is no coherent body of knowledge that is based on transparent access to an independent reality as perspective on all knowledge is context bound i.e. is a construct defined by cognitions at a given time with a given culture/society etc. (Rorty, 1991). The neopragmatic postmodernist emphasise action which works to bring about desired aims, the same aims could be accomplished in a multitude of ways. What is important is only that it fulfils the purpose (Margolis, 1986). The pragmatist focuses on individual cases and develops individual tailored interventions based on holistic system-orientated theories of change e.g. psycho medication; CBT; social skills and activities of daily life; job training, family therapy (Anthony, 1990; Lieberman, 1992). The results can be evaluated and described in an organisational context and then systematic comparisons and contrast of the better and worse cases can be used to derive pragmatic principles, not scientific causal principles. Examples of this can be described as evidence based practice (EBPP) in psychology which starts with the client and asks what research evidence will assist the psychologist in achieving the best outcome as opposed to empirically supported treatments, which start with treatments and asks whether it works for certain disorders or problems under specific circumstances. EBPP articulates a decision making process for integrating multiple streams of research evidence into the intervention process (Sackett et al, 2000). Thus instead of searching for underlying laws and truths science should serve to collect, organise and distribute practices that produce useful or intended outcomes. Thus the modernist system helps to offer cognitive templates for organising thinking and understanding of the client's experience in the practice of clinical judgements but the postmodernist also takes on-board the belief in individual uniqueness/difference. The problem arises with the novice practitioners who have little prior knowledge to build their understanding of the uniqueness of clients, so they follow rules and manuals. The expert will generate pragmatic psychological post-modernist practice where their knowledge is dynamic and is generated from context-dependent understanding and is constantly being revised and adjusted in the light of experience – known as 'reflection in the action' (Chi et al, 1988; Dreyfus and Dreyfus, 1986; Schon, 1983). Here it is seen that experience is not a function

of sure knowledge but is made up of previous constructs or interpretative interactions. (Basch, 1988).

Thus the knowledge derived from practice is always unfinished, theories of practice and past experience only serve as a guide to anticipate client responses, or provided an array of grids through which to view the client. Knowledge acquired in practice from every clinical session creates multiple micro-theories as heuristic indicators of how to process understanding of the present situation. The mistake would be for the practitioner to universalise his/her experience as applicable to all clients in all situations. Thus the experienced practitioner is comfortable with diversity of theories and sees them as metaphors and models. Therefore experienced practitioners develop a psychology of practice and as such focus on pragmatic actions in the service of the mental health and personal development of people. The experienced therapist has the facility to make use of multiple conceptual systems and thus can recognise more facets of a client than one using one theory. Such a therapist can use systematic eclectics or integrative theory which serves to increase the therapist's repertoire of interpretive schemes and encourages viewing the client from multiple theoretical perspectives (Beitman, 1987; Garfield, 1989). The psychology of practice incorporates bodies of knowledge which are aggregates of the professional community's experiences of what has been beneficial to clients. In the area of the psychology of practice, academic psychology's search for truth has limited relevance. Even as psychology develops academic psychology may evolve by discarding previous beliefs systems on the premise that more recent systems are more able to reveal the truth. This may seem tidy but is still a misguided remnant from modernism.

Postmodernism is a reflection of a general feeling of the miscarriage of the modernist project. This is not to negate the need for empirically supported therapies that provide evidence of efficacy (Chambless and Hollon, 1998; DeRubeis and Crit-Christoph, 1998). As a result there is a sizeable body of evidence that, for example, attests to the effectiveness of psychological practices, and compared with medication, are more enduring and show much larger effect sizes than those achieved by medical treatments (Barlow, 2004; Chiles et al, 2002; Hollon et al, 2006; Lambert and Ogles, 2004; Lipsey and Wilson, 2001; Rosenthal, 1990; Wampold, 2001; Weisz et al, 2005; Yates, 1994). Nevertheless the psychology of practice demonstrates the effectiveness of using postmodernist principles by showing how the postmodern discipline works effectively (as evidenced from the above researchers). Thus psychotherapy works, but also different therapies do not yield benefits of different types or degrees on the outcome (Smith et al, 1980; Mahoney, 1991). What is

seen as more important is that the client has a meaningful relationship with the therapist, has an increase understanding of self and the difficulties experienced; has some emotional release, gains therapist support for positive behaviours and experiences lessening of the troublesome problems (Garfield, 1989).

The above is seen as the context for the development of this research project, one that was formulate as a reaction to the academic psychologists who follow the modernist paradigm and seem to try to formulate linear relationships within human behaviour and proceed to narrow down the causes of such behaviour in the search for the ultimate truths or laws of human behaviour. In their search for these supposed truths they narrow down or control behaviour such that most results serve very little from the practitioner's point of view. The resultant findings are frequently of little use to the practitioner in the field where conditions are not in a rarefied or controlled environment and where the practitioner is working at multi-modal levels of awareness and knowledge at conscious and subconscious/intuitive levels of processing. Given the above suggested weakness of the modernist logical positivistic approach of the academic psychologists this research aimed to follow a postmodernist approach, to research into the effectiveness of the brief therapy within an employee assistance programme by ensuring that this project was carried out in a naturalistic setting with all its disadvantages from the modernist's point of view but with the possible advantages to the pragmatic practice psychologist's perspective. Thus as such it would be hoped, as the research was carried out in the context and conditions within which the practitioners function, that as such it would inform the practitioner with knowledge that will be of more immediate use to them than has been the practitioners' experience of the findings of academic psychological research. A postmodern pragmatic perspective also directed the use of the tools and concepts chosen in this study for examining the change process. The variables that were explored in the study (see Table 4.2; page 50) were not derived from an abstract theory-driven model of EAP counselling, but instead represent a synthesis of the concepts that inform everyday routine practice, as reflected in the professional literature. In addition, it should also be borne in mind that in keeping with the philosophy of the postmodernists, the findings of the study can only be said to be context-dependent, rather than making any claims to arrive at universal 'truths' or laws. The aims of the study are intentionally modest – to contribute to on-going debate and conversation around the effectiveness of EAP counselling (Rorty, 1979) and to add to the practical repertoire of professional understanding of counsellors working in this field (Fishman, 1999).

2.16 Research difficulties.

In the above sections it can be seen that many studies have produced useful information or findings but many if not all have some methodological problems that make the conclusions rather less than clear cut or make for certain difficulties in using the measure. This is especially true for any studies that are in a naturalistic setting as the ability to control all variables is somewhat limited. On the other hand if all variables were completely controlled other than that which was being tested then the findings would tend to be of little use to the pragmatic practitioner in the field who may work in an integrative and multi-modal way with clients who have multiple problems. Thus in any piece of research there has to be a trade off between the modernist perspective that requires scientific rigour and the view of the post-modernist who wishes it to be relevant to the practitioner in the field (e.g. must have a degree of realism). It is, for the most part, difficult to be scientifically rigorous and to reflect the conditions of everyday working practice.

Further there are a number of other difficulties that generally present themselves when trying to provide research into stress and EAP effectiveness. Firstly there is the fear of the providers showing effectiveness when in competition with each other; or union reactions if staff are seen to be stressed. Researchers, therefore, often use satisfaction studies to avoid any critical research which might require access to clients. In reality the client satisfaction studies make only a very minor contribution to the evidence for effectiveness as they say very little with respect to what the therapy has been effective in changing, i.e. they bear little or no relationship to whether it helped to change anything. All they show is that the clients were happy that the counsellor had time to focus on them and listen to them (McLeod, 2001 and 2007, Reynolds, 1997). Often the research into EAPs is seen as being too brief, with no longitudinal collection of data (Giga et al, 2003) and rarely employs control groups. Arthur (2000) concluded that studies into the effectiveness and cost-effectiveness of EAPs fail to deliver in relation to organizational outcomes because they are 'superficial' and do not reflect the complex, interactive nature of work stress.

Also much of the research into the effectiveness of EAP counselling has the difficulty that ethically or practically, control groups cannot easily be created and then be measured. Sprang (1992) tried by comparing those who stayed with the counselling and those who dropped out, both started with similar scores but those who received counselling improve in the measures for depression (BDI) to within the normal range. The difficulty was that it was not apparent if the "control" group was examined after the treatment period of the

experimental group. Others found significant differences in all measures of distress (mental health functioning, work functioning, personal functioning, well being, rating of personal problems and sickness absence) between clients and non-counselling colleagues, significant by one standard deviation worse off, also worse in the number of days taken off sick and GP visits (Worrall, 1999).

Within medicine, the use of control groups, via RCTs (random control trials) tends to offer the most reliable and valid form of evidence in the effectiveness of a particular treatment. But as suggested above it is more difficult to apply such concepts of research into the realm of human behaviour such as counselling and psychotherapy because of the tensions between scientific validity and practical usefulness/validity (Rowland, 2007; Rowland and Goss, 2000). Some have noted that non-randomised trials give estimates of effectiveness higher than those in RCTs (Wessely, 2006), whereas others found the opposite effect (Shadish et al, 2000) or no effective difference (Concato et al, 2000; Kunz and Oxman, 1998). The problem of RCTs is that they also often filter out the more complex cases so do not reflect the mix of cases that come to the counsellors in their practice, so are not naturalistic. The Sheffield studies tried to create control groups but they did not reflect the realities of work place counselling either (Barkham et al, 1999). Iwi et al (1998) also tried but came up against ethical issues and had to change direction. Studies tend to show improvements in anxiety, stress, self-esteem as compared with control groups. But at least some (15%) may have improved without the help any case (Howard et al, 1986). But to be truly comparable the control group should also be tested for changes in stress levels over same period that the treatment group is receiving therapy, but this is hard, as it is also difficult to take into account all other organisational changes during that period.

Sprang (1992) found significant differences between treatment and non-treatment groups suffering from depression in their decision-making ability, suicidal ideation, and ability to work. Other studies that have randomly allocated clients into counselling or waiting lists conditions have found in long-term follow up, that counselling intervention was shown to be much more beneficial than the waiting-list condition (Reynolds 1997).

In this study a form of control was set up by carrying out a large stress audit via a “Well-being” questionnaire and which randomly sampled the total work force and the result would provide a baseline or norm against which the sample of clients who sought counselling could be compared. Strictly speaking the ‘Well-being’ study was not a control group as they were not necessarily a group who were seeking help. What this study set out

to look at was how effective the counselling work was in reducing stress, increasing mental health and changing coping strategies to such a point where the counselling subjects' scores were no longer significantly different from that of the normative population. There lies here an assumption of health within the normative population, but given that population defined the baseline, no value judgements as to what constituted health were involved, all that was to be examined was how much after therapy and at the six month follow-up period had the counselling client group moved their scores for all the measures towards those of the norm created by the 'Well-being' study.

Another difficulty is that it is hard to get organisational data on clients as confidentiality is important to most clients and organisations, added to this, and because of this, missing data is a problem. A researcher can say nothing about the reasons for the missing data or what can be said about the differences between the responders and non-responders, and because of confidentiality, will find it hard to follow-up on the missing data. Many studies suffer from loss of data due to drop out (attrition) and this may skew the results showing only the more satisfied clients and those with more positive improvements, particularly if data is only taken at the end of therapy. This leaves open the possible assumption that those who do fill out end of therapy questionnaires would tend to be those who feel more satisfied with the treatment, and those who did not fill out the feedback questionnaires may be expressing their irritation and annoyance at not feeling satisfied by failing to respond, or it may be that they did not return for their last session (so did not receive a post-treatment questionnaire), feeling that they had so improved that they did not need to return and waste the therapist's precious time. The point here is that no assumptions can be made about non responders, though this might suggest the importance of using session by session questionnaires. Only a few have had clients complete questionnaires at each session as per Lambert et al's study (2001). All variables or problems cannot be all be controlled for, thus compromises must be made to produce any meaningful research and many methodological problems are involved where commercial secrecy is an issue.

Further, much of the research that exists is in USA and there was little in the UK on the effectiveness of EAPs though this body of knowledge is growing (Highley and Cooper, 1993). Few counsellors are interested in research and issues of confidentiality interfere with the idea of carrying any out (Sonnenstuhl and Trice, 1986 in Highley and Cooper, 1993). EAPs need research to find out if they meet the goals they sets out to achieve and if not, how they can address what can be done for them to become more effective and targeted (Masi, 1984). The difficulty can be that EAP managers are likely to resist the

invasion of outside researchers who are often put off by the complex negotiations required to initiate and carry out the research.

Thus, the problem in this country appears to be that much research into EAPs appears to focus on client satisfaction responses and there is not enough research into the process of work place counselling. It is maybe not a question that it is effective, but the questions should be concerning what could enhance its effectiveness. This study tried to address this issue. This study was initially undertaken as a result of the observation that an EAP company was selling a product saying that counselling was effective in helping people work more efficiently and it was cost effective in cutting down sickness behaviour and the levels at which people are present at work (introducing the concept of "presenteeism"). However it seemed that there was little evidence to justify these claims at the time as many of the previous studies into the effectiveness of EAPs had come from America where the structure of EAP services were more focused on treatment of drug and alcohol dependency treatment and various fitness programmes or that many of the studies in the UK focussed on client satisfaction data. This therefore seemed to indicate that it was important to carry out research that would examine not necessarily the contention that brief therapy through EAPs is effective but what is it more effective with. The studies that were seen as most helpful to this study were those of Alker (2000), Cooper and Sadri (1991) and Worrall (1999) as they used tools that were similar to those used in this study. Nevertheless, as with most research studies in the effectiveness of brief therapy via an EAP, this study will also have its methodological short-comings as its aim was to explore issues that would be directly relevant to the practitioner on the ground, thus it was a naturalist study.

2.17 Summary

Employee Assistance Programmes (EAPs) in the UK have developed to the point where they now focus on occupational health promotion and broad-brush employee assistance programmes. The main focus now is derived from the recognition that there are economic costs to the employer and employee alike where the employee is suffering from the effects of stress. The main focus of this study was an examination of the effectiveness of the brief therapy/counselling part of an EAP package particularly with reference to demographic differences in effectiveness such as gender, age and professional status.

From the exploration into brief therapy, it was seen that the consensus was that most EAP packages used the model of 6-8 sessions. But the rationale for this model did not seem to take into account whether such a number of sessions produced effective change rather than

client satisfaction, given possible variations in degree of severity of the client's problems. However, overall this model of brief therapy as used by most EAP providers was seen as effective with relatively well functioning individuals with relatively limited number of presenting problems. But its effectiveness may vary depending on those who are likely to use an EAP service. This, it was seen, in past research, tended to be the younger age groups of women, though others thought there was little to suggest that demographic characteristics affected utilization rates. However, it was pointed out that very little serious regard had been paid to research into the effects of, for example, age and gender, on the utilization rates and more especially the effectiveness of brief therapy within an EAP service.

But more specifically, the issue of effectiveness was explored. It was seen that the research into this needed to move away from the shallow client satisfaction rates research and thus effectiveness was examined first with respect to cost effectiveness. The research presented showed, irrespective of the difficulties and variations in examining the cost effectiveness of the counselling in the provision of EAPs, that such provisions seemed to be cost effective with the savings varying in ratios from 7:1 to cost neutral. Further it was seen overall that brief therapy did seem to be effective in reducing sickness absence and improving/promoting psychological change such as reducing depression, anxiety and raising self-esteem. But the difficulty seemed to be whether these improvements had a direct effect or not on changing the employee's job satisfaction and/or work performance. Several studies found little improvement in job satisfaction yet others found improvements in work performance as a result of the therapy. This left open the question whether the two were similar or different concepts and whether counselling could improved on work functioning by focussing on reducing the experience of work stress.

This lead to an exploration as to whether counselling improved client's sense of well-being and mental health. The question that this research study set out to examine was whether a change in coping strategies and the concept of stress had a direct affect on the client's mental well-being and work performance. The difficulties with examining particularly, coping strategies, was in the definition of the concept and hence in finding an effective psychometric tool for measuring it. Thus the various difficulties with finding an appropriate tools were explored, but given that the focus of much of the work in brief therapy would focus on the client's cognitions concerning their stressors (via CBT) and/or would focus on adaptive responses (solution/problem focussed therapy), it was felt that a tool that focussed on response primarily would be the most useful in this instance. But as

with other difficulties, the problems with defining coping strategies and finding an appropriate tool for measuring it, it was also acknowledged that researching into the effectiveness of the brief therapy as provided by an EAP service has certain methodological problems particularly because this study was a naturalistic one. However, it was felt valid to accept those limitations as defined by the academic modernist psychologists in order that the research outcomes might be more informative to the post-modernists orientated pragmatic practitioner in the field with respect to their practice within the realities of the problems presented, etc., in workplace counselling.

3. Key research questions

The key research questions that this study looked to address were:

1. Was brief therapy, as offered in an EAP programme, effective in producing change in levels of stress, mental health and coping strategies?
2. Was the service cost-effective?
3. Was change maintained or improved upon by the 6 month follow-up stage?
4. Was the level of effectiveness of therapy affected by differences in demographic factors such as gender, age and professional status?

4. Method

4.1 Introduction

This study was a Ph.D. research programme under Professor John McLeod formerly at the Department of Applied Social Studies at Keele University, now at the University of Abertay Dundee. It was carried out on the behalf of Norfolk County Council. The study set out to examine the effectiveness of brief therapy within the Employee Assistance Programme as provided by an external provider for the Norfolk Support Line. Ethical approval for the study was received from the ethics committee of the Department of Applied Social Studies, Keele University.

The core focus of the study was to look at the effectiveness of the therapy being offered to those subjects who came for counselling from the departments who had purchased the service, namely the departments of Education and Social Services. This was a naturalistic study as no control groups could be created for the commercial and ethical reasons discussed in the literature review.

However, if change was to be assessed then the counselling subjects would need a baseline norm against which to measure their degree of difficulty and the degree with which the counselling had helped to improve their situation or difficulties as matched against a norm. Many studies use general population norms but it is difficult to be sure how comparable/representative such norms may be as compared with the subject group.

Therefore it was decided to find a baseline normative score level from the organisational population from which the counselling subjects were coming. The main aim was to carry out this baseline 'well-being' study within the two departments which had purchased the service. This was to be carried out by giving the same questionnaire which was to go to the counselling subjects, to a random sample of the staff in those two departments. However, the other departments of the organisation heard about the baseline normative study and requested to be part of that study. Thus the baseline response norm was formulated from the responses from a random sample of the whole of the organisation's work force. The advantage of this measurement was that it was produced from a very large population sample within the organisation. It also had the advantage that it was not from any other population which may have produced norms that are more specific to that population and which may present problems if used as a representative norm for other population groups such as that being examined within the Norfolk County Council staff. But by the same reasoning, the norms produced could only be said to be representative of

the Norfolk County Council work force population. However, it did mean that those coming for counselling were being match against their peers and not against any other population group.

This study was a naturalistic outcome study. Its purpose was to analyse the effectiveness of the brief therapy as offered to those coming for counselling under an Employee Assistance Programme as utilised by the Education and Social Services departments of Norfolk County Council. The counsellors who offered the service were a group of about twenty-three therapists who were registered affiliates with the company (PPC – Personal Performance Consultants UK) who provided the service. The counsellors saw the clients within their private practice and they were located over the whole of Norfolk county so that the client's would not have to travel far to see a therapist. There was no control with respect to their therapeutic orientation, the criteria used for their recruitment was that they were required to hold a recognised accreditation qualification (with for example, BPS {British Psychological Society}; BACP {British Association for Counselling and Psychotherapy}; or UKCP {United Kingdom Council for Psychotherapy}) and that they were comfortable working within a brief therapy model.

The organisational structure for the provision of the counselling service was that all employees within the departments who had bought the service, i.e. the Education and Social Service departments were given a card by their employers when the service commenced or when they joined the departments. This card informed them about the services on offer and gave them a confidential telephone number to ring when they wanted help within the range of services provided. EAP services that were provided included, free counselling, career, legal and financial advice.

This study focussed only on the counselling provision. If a client wished for help via counselling they would ring the confidential telephone number, without having to go through any gate keeper or regulatory system, so they could access the service without their employers knowing they were using the service, thus maintaining confidentiality. They would then speak to a telephone counsellor who would assess their need for face-to-face counselling. If it was agreed that this was what was felt would help them, they would be asked at this point whether they would mind participating in the study. They were informed then that they had a right to refuse and that this would not affect their access to counselling. There was no selection of the subjects for the study; all who agreed to participate were accepted as subjects. Thus this was a fully naturalistic or practice based

study using no control groups, for as mentioned in the literature review, this would have been unethical and commercially unacceptable.

If face-to-face counselling had been agreed would be the best course of action for the calling client, the telephone counsellor told them that they would be contacting a counsellor in their area who would get in touch with them to arrange a suitable time for them to meet for an assessment and possible brief therapy treatment. Also, if they had agreed with the telephone counsellor that they did not mind participating in the study they were then told they would be sent a pre-treatment questionnaire to fill out prior to seeing their therapist and they were asked to either hand those questionnaires to the therapist when they first met (who would then send them on) or send them directly in the s.a.e. to Keele University. When they received the questionnaire, they also received a letter explaining the study (see appendix B14) and assuring them that their responses would remain confidential and that they would only be identifiable on the forms as a number (in order to match subsequent responses).

Prior to the start of the research project the researcher had had several meetings with the heads of departments involved in the research and with the head of personnel to discuss the design and organisation of the study. In addition the researcher also had several meetings with most of the counselling affiliates who would be seeing the counselling clients, to explain the purpose of the research and the help/administration that would be required of them.

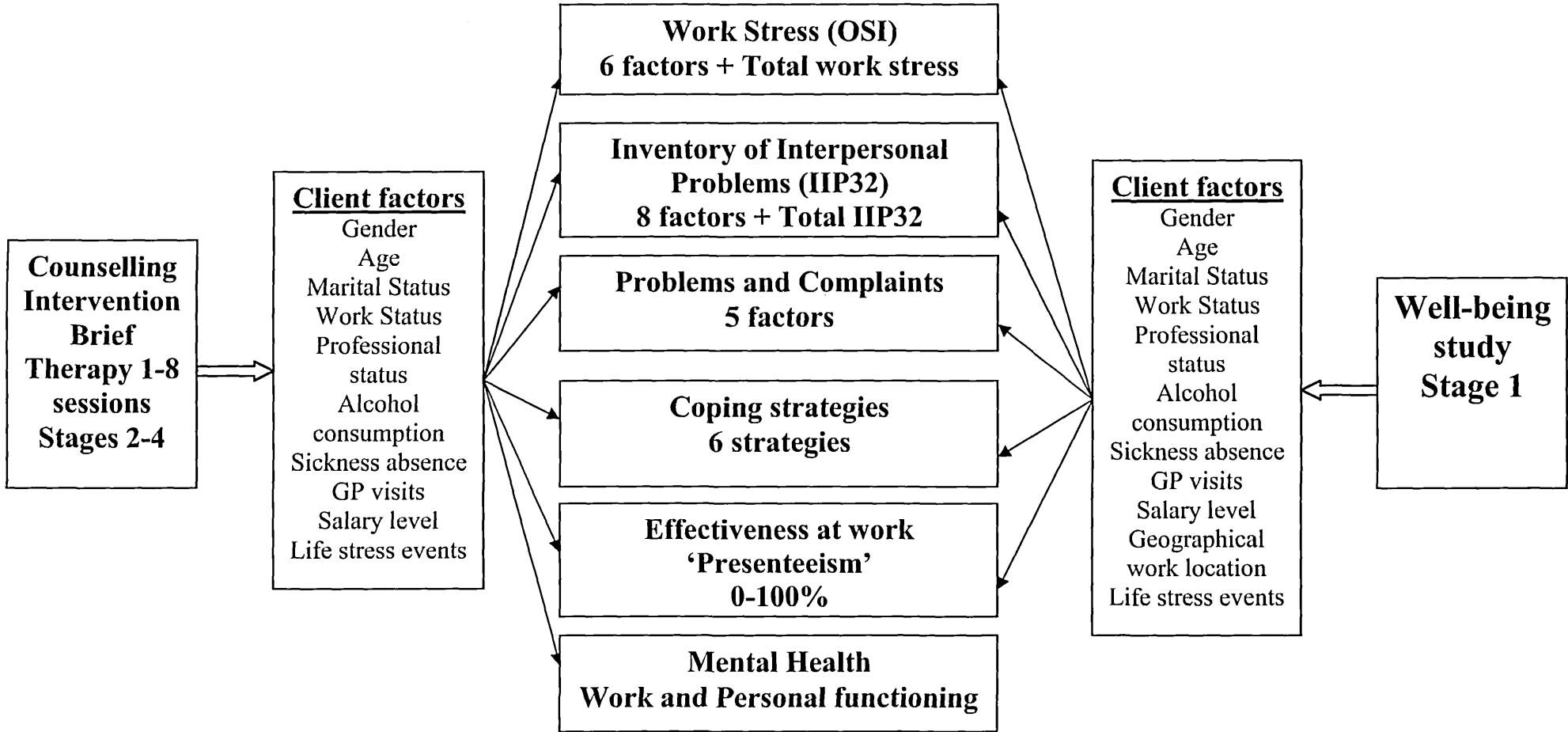
Once the study had been designed, the organisation took on the role of circulating the questionnaires for the 'Well-being' part of the study. These questionnaires were circulated randomly (for the larger departments) using the employees' staff number and randomly selecting that number, using random number tables; for smaller departments of less than 240 employees, all staff were sent the questionnaire. The questionnaires were distributed by the personnel department of the council. With the questionnaire was included a stamped addressed envelop for returning the questionnaire to the University of Keele and a supporting letter from the Director of Personnel of Norfolk County Council. The data from the 'Well-being' stage (stage 1) of the study was loaded onto a spread sheet using SPSS programme by a paid research assistant who had been given instructions concerning how to load the data by the researcher. Then the data was sent to the researcher for analysis.

The questionnaires for the counselling clients (stages 2-4) were distributed by the administration department of the EAP provider, with the researcher being in regular contact with them to ensure that the correct questionnaires were being sent out at the right time (see appendix B15: questionnaire distribution instructions). These questionnaires were returned to the head office of the provider and then sent onto the researcher for data collation and analysis.

The researcher was a senior consultant counsellor in the employ of the provider so was given free access to the company's data and records but was not employed at the head office and was not a provider of the counselling that was offered to the employees of the county council involved. The researcher, a chartered counselling psychologist and accredited psychotherapist (BACP), was however, carrying out the study as a part-time Ph.D. student initially at the University of Keele (later transferring to the University of Abertay Dundee) and thus it was made clear to all that the ownership of the research lay with the university. This hopefully avoided any pressure or influence which could bias the study in favour of any of the other parties involved, though it was also agreed that any published results would first be shared with the organisations who had been involved in the study.

A pragmatic conceptual framework for evaluating the effectiveness of brief therapy

Design summary: Table 4.2



4.2 Structure of the study

The research method used was in the form of an extensive questionnaire, various forms of which were used at the different stages of the research as illustrated graphically above in Table 4.2.

Four stages were planned in the research in which questionnaires were used: the 'Well-being'/baseline normative measurement stage (stage 1); client assessment stage (pre-treatment, i.e. just prior to counselling – stage 2); post-treatment stage (stage 3: immediately after counselling) and follow-up stage (stage 4: 6 months after closure).

The first stage 'Well-being' study (stage 1) set out to measure the mean or normative levels of stress, etc. within the whole organization where the study was being carried out. This normative level would then be used as a baseline against which to measure the stress levels, etc. of the client's coming for counselling.

The next stage (stage 2) of the research focussed on the clients coming for counselling. The objective of the client assessment (pre-treatment) questionnaire was to have all these clients complete a questionnaire prior to treatment. This questionnaire was based on the 'Well-being' study questionnaire so that the latter would act as the baseline or normative level measurement. The client assessment included a number of additional questions, which had formally been part of the service monitoring questionnaires (sent out to all clients after treatment prior to this study). The goal was to have this questionnaire given/sent to the client prior to treatment. However, this proved not always possible, so the clients were also asked if they had filled in the questionnaire before or after their first session. Careful instructions were issued to administrators and counsellors in order that the subjects would be given the initial questionnaire prior to their first session if possible (see appendix F for questionnaire samples, explanatory letters for clients and distribution instructions for administrators at the provider's head office).

The post-treatment questionnaire (stage 3: after counselling) was either given to the clients by their counsellor when they had finished seeing them or was sent to the client after the closed case notes had been received by head office of the service provider.

The follow-up questionnaire (stage 4) was sent out to all clients 6 months after their case notes had been sent in as being officially closed, by the administration head office of the service provider. The administration formulated a system for reminding them to send out

the follow-up questionnaires six months after the closure of the case. This questionnaire asked for responses to most of the same questions and scales that were asked in the post-treatment questionnaire. The objective here was to examine if the responses changed over the six months, with particular reference to looking at how permanent were the possible positive changes that were presented at the end of therapy i.e. were the changes still of the same order after six months? It was of particular interest to know how much, the changes in coping strategies, continued to show the level of change as was seen at the end of treatment as shown by the post-treatment questionnaire.

Questionnaire structure – table 4.3

Focusing on measures relevant to practice: Pragmatic practice orientated conceptual design structure

Stages 1 and 2	Stages 1 and 2	Stages 2-4	Stages 1-4				
Demographics	Life Events Scale (Holmes and Rahe, 1967)	Mental Health, Work and Personal Functioning	Presenteeism	Occupational Stress Indicator – OSI (Work Stress) (Cooper, 1978)	Inventory of Interpersonal Problems – IIP32 (Self Description) (Barkham and Hardy, 1994)	Physical Symptoms (Problems and Complaints) (Cranwell-Ward, 1987)	Coping Strategies (Hammond et al, 1992)
Gender	Life Events Rating Scale (1-100)	Mental Health (Ware and Sherbourne, 1992)	Effectiveness at work (1-100%)	Factors intrinsic to the job	Hard to be sociable	Emotional reactions	Rational actions
Age		Work Functioning (Howard, Luger and O'Mahoney, 1991)		Managerial role	Hard to be assertive	Disrupted thought processes	Palliative response
Marital Status		Personal Functioning (Worrall, 1999)		Relationships with others	Hard to be supportive	Physical illness	Social support
Work Status (FT or PT)				Career and achievement	Hard to be involved	Behavioural indications	Depressive response
Job Title				Organisational structure and climate	Being too aggressive	Positive reactions	Emotive response
Alcohol Consumption				Home/work interface	Being too open		Passive response
Days off Sick				Total work stress	Being too caring		
Visits to GP					Being too dependent		
Salary Scale					Total IIP32		

4.3 Questionnaire structure

As illustrated in table 4.3 above, the questionnaire first asked demographic questions, such as age, sex, occupation, marital status and with whom the respondent lived. They were also asked if they were full or part time employees. The questionnaire asked about the respondents smoking and drinking habits and amount of sick leave taken in the last year and visits to their GP, {self-reported sickness absence has been found to be a reliable measure of actual sickness absence (Rees and Cooper, 1992b; Robertson and Cooper, 1990)}. The above was the same for all groups. The sick leave question was particularly geared to offering an opportunity of measuring the cost of sickness for each department and to the council as a whole.

The second page of the questionnaire had three different versions, one for each of the following; the Social Services, the Education Department and the Central Services. This page asked about which sectors/divisions they worked for, in which geographical area was their work place and then they were asked to state their salary scale point or grade. The latter would then be recoded to give actual salaries (scales were provided by the Personnel department of the county council) which would be used to give actual costs of sickness and 'presenteeism' (defined as the employee's estimated level of effectiveness/efficiency in the workplace). (See appendix F for samples of all questionnaires used).

The respondents were then asked to respond to nine scaled questionnaires: 1. a shortened form of OSI (Occupational Stress Inventory) as a measure of work stress; 2. Inventory of Interpersonal Problems – 32 (IIP32) as a measure of personality differences; 3. Problems and Complaints as a measure of physical symptoms of stress; 4. Life Events scale, as a measure of other life stressors; 5. Coping measures; 6. Measurement of "Presenteeism"; 7. Mental Health scale (MHI5) of the SB166 Short-Form Health Survey; 8. Work Functioning scale; 9. Personal Functioning. (The last three scales were only used for stage 2-4.)

4.4 Shorten form of OSI (Occupational Stress Inventory) as a measure of stress

The first scale asked questions about stress at work. This consisted of thirty questions which would be grouped to examine six areas which create stress at work. This scale was a reduced version of Prof. Gary Cooper's Occupational Stress Indicator (OSI) and was used with his permission. The original contained 60 questions. It was felt this would be too many questions for a sampling survey, thus 24 questions from the OSI were selected as being those that this group (local authority workers) would be most likely to complain

about when coming for therapy/counselling (these were all tested for internal reliability – see appendix B14). A further six questions were added that were used in a previous study of clients coming for counselling to an office in the City of London. This would allow for possible comparison of some of the data to be made with a sample that did not come from a particular organisation/company (this analysis is not included in the report). The questions from the reduced OSI would then be grouped to produce six stress factors: Factors intrinsic to the job; Managerial role; Relationships with others; Career and achievement; Organisational structure and climate, and Home/work interface. A further measure was also used labelled Total work stress, this was obtained by taking the mean of the mean sums of all the six work stress factors. The subjects scored each item on a scale of 1-5 as below with respect to how much each the item applied to them:

Not at all	A little bit	Moderately	Quite a bit	Extremely
1	2	3	4	5

These scores were recorded as the raw data and then those items that applied to particular factors were summed and that sum was divided by the number of items in that factor. This final figure was taken as the score for each factor for that subject. Thus each subject would have a mean score for each of the 6 factors ranging from 1 to 5, where the higher the scores indicated greater stress with respect to that factor. A five point scale was used as it is believed that having a mid point is easier for subjects to respond to when clients are not sure, either way, as how to respond.

Each factor looked at the following issues involved in work stress:

Factors intrinsic to the job involved stress caused by, for example, poor physical working conditions and the effects of changes in shift work. It also included issues around work overload either quantitative (i.e. having too much to do) or qualitative (i.e. being too difficult) and working long hours. The latter of course has consequences on the employee’s productivity and creativity as a tired employee takes longer to produce work (hence has to work even longer hours) and is likely to make more errors. Long hours will also affect relationships at home. These factors also included job under-load associated with repetitive, routine, boring and under stimulating work which has been associated with ill health. This in sum takes in workload, variety of tasks and rates of pay. Four items

contributed to this factor (items 7, 12, 15 and 21). (Cronbach alpha internal reliability test for this item with N = 2291 was .69).

Item example for this factor: *I have had far too much work to do.*

Managerial role, i.e. a person's role at work was seen as another main source of occupational stress, involving role ambiguity (i.e. conflicting job demands), responsibility for people and conflicts stemming from lack of clarity of organisational boundaries. This is concerned with how individuals perceive the expectations others have of them. Four items contributed to this factor (items 16, 17, 25 and 30). (Cronbach alpha internal reliability test for this item with N = 2291 was .68).

Item example for this factor: *I have experienced conflicting job tasks.*

Poor Relationships with others at work creates stress. This included the nature of the relationships and social support from work colleagues and from home, managers and subordinates and whether they experience harassment or bullying at work from colleagues or management. It also related to the conflicts people might experience between their own values and those of the organisation. Two items contributed to this factor (items 13 and 27). (Cronbach alpha internal reliability test for this item with N = 2291 was .56).

Item example for this factor: *I have experienced a lack of social support.*

Career and achievement problems were another major source of stress arising from such things as the impact of over promotion, under promotion, lack of job security, fear of redundancy and thwarted ambition. This includes individuals' perception of their career development, their promotion prospects and perceived threats of redundancy. Two items contributed to this factor (items 20 and 28). (Cronbach alpha internal reliability test for this item with N = 2291 was .72).

Item example for this factor: *I have felt undervalued.*

Another potential source of occupational stress was related to **Organisational structures and climate**, which included such factors as office politics, lack of effective consultation, lack of participation in the decision-making process and restrictions on behaviour. Therefore this involves problems arising out of bureaucracy, communication problems and

morale in the organisation. Four items contributed to this factor (items 9, 10, 22 and 26). (Cronbach alpha internal reliability test for this item with N = 2291 was .81).

Item example for this factor: *I have experienced a lack of consultation and communication.*

A major source of stress and one which is frequently brought to counselling is the effect that work pressures (such as fear of job loss, blocked ambition, work overload, etc) have on the families of employees i.e. **Home/work interface**. Employees who work long hours are too tired to give quality time to their spouses and/or children. That neglect can result in domestic conflict and possibly eventually relationship break-up. This, in its turn, affects the employee's work performance, as disharmony at home will affect the employee's concentration at work. Employees under normal circumstances find home a refuge from the competition and demanding environment of work, a place where they can get support and comfort. However, when there is a career crisis, for example, the tensions the individual brings with them into the family affect the spouse and home environment in a way that may not meet their sanctuary expectations. Seven items contributed to this factor (items 8, 11, 14, 19, 23, 24 and 29). (Cronbach alpha internal reliability test for this item with N = 2291 was .77).

Item example for this factor: *I have been taking work home*

4.5 Inventory of Interpersonal Problems – 32 (IIP32)

The work stress scale was followed by the '**Self Description**' scale this was in fact a scale better known as the Inventory of Interpersonal Problems - 32 (IIP32) as developed by M. Barkham and G. Hardy originally from the University of Sheffield (Barkham et al, 1994 and 1996). This was developed as a shortened form of an inventory designed by Horowitz et al (1988) in U.S.A., which contained 127 items. This scale was chosen on the understanding that the reactions to stressful situations could vary depending on personality differences, as can be illustrated by differences in how individuals relate to others, in this case, particularly at work. This scale contained 8 sub-scales labelled as follows: Hard to be Sociable, Assertive, Supportive and Involved; and Being: Too Aggressive, Open, Caring and Dependent.

Hard to be sociable = Difficulties in being sociable with other people. Four items contributed to this factor (1, 3, 7 and 9). (Cronbach alpha internal reliability test for this item with N = 2291 was .85).

Item example for this factor: *It is hard for me to join in on groups.*

Hard to be assertive = Difficulties in asserting oneself in relation to the demands of other people. Four items contributed to this factor (2, 4, 6 and 11). (Cronbach alpha internal reliability test for this item with N = 2291 was .32).

Item example for this factor: *It is hard for me to be assertive with another person.*

Hard to be supportive = Difficulties in putting the needs of others before those of oneself. Four items contributed to this factor (13, 14, 15 and 16). (Cronbach alpha internal reliability test for this item with N = 2291 was .80).

Item example for this factor: *It is hard for me to be supportive of another person's goals in life.*

Hard to be involved = Difficulties in developing or maintaining a close person relationship with another person. Four items contributed to this factor (5, 8, 12 and 19). (Cronbach alpha internal reliability test for this item with N = 2291 was .78).

Item example for this factor: *It is hard for me to experience a feeling of love for another person.*

Being too aggressive = Difficulties in controlling ones feelings with other people. Four items contributed to this factor 20, 21, 28 and 30). (Cronbach alpha internal reliability test for this item with N = 2291 was .70).

Item example for this factor: *I fight with other people too much.*

Being too open = Difficulties in setting a boundary between appropriate and inappropriate self-disclosure. Four items contributed to this factor (10 and 17 {converted scores i.e. scores were reversed}, 24 and 29). (Cronbach alpha internal reliability test for this item with N = 2291 was .66).

Item example for this factor: *I tell personal things to other people too much.*

Being too caring = Difficulties created by responding to the needs of others, at the expense of meeting ones own needs. Four items contributed to this factor (items 18, 25, 26 and 32). (Cronbach alpha internal reliability test for this item with N = 2291 was .77).

Item example for this factor: *It is hard for me to attend to my own welfare when somebody else is needy.*

Being too dependent = Difficulties with independence; valuing oneself more in terms of how others see one self. Four items contributed to this factor (22, 23, 27 and 31). (Cronbach alpha internal reliability test for this item with N = 2291 was .69).

Item example for this factor: *I want people to admire me too much.*

As with the stress scale subjects were required to score their responses on a scale of 1-5 marking which best represented how much the item applied to them. As before the raw scores were recorded but then the scores for two of the items were reversed. This was for item 10 (Tell personal things to other people; and item 17 (Open up and tell my feelings to another person). Thus a score of 5 became 1; 4 became 2; 2 became 4 and 1 became 5. Then the scores within each factor was summed and divided by the number of items in that factor to get a mean score for that factor for each subject.

The results from this scale were not presented in this report as they did not seem to be very sensitive to change for this group of subjects and for reasons of limited space but can be found in the appendix B7.

4.6 Problems and Complaints

The next questionnaire scale looked at Problems and Complaints which was a way to look at the symptoms which can be seen as warning signs that the individual was experiencing stress. This scale was taken from a book called 'Managing Stress' (Cranwell-Ward, 1987) and used by the EAP provider organisation in many workshops on stress. The responses were divided into five sub-scales as follows: Emotional reactions; Disruption of thought processes; Physical illness; Behavioural indications and Positive reactions. This scale consisted of a 35 item scale and these items were grouped into the five above factors. As above the subjects were required to respond on a 5-point scale with whatever score matches how the item statement applies to them. Again the raw scores for each factor

were summed and divided by the number items included in each individual factor, this was seen as the mean score for that item for each factor for that subject.

The type of symptoms that would fall into the group labelled '**Emotional reactions**' included being irritable, feeling angry and aggressive, anxious, depressed, experiencing mood swings or withdrawing from people. Seven items contributed to this factor (items 1, 8, 11, 18, 25, 29 and 34). (Cronbach alpha internal reliability test for this item with N = 2291 was .90).

Item example for this factor: *Been irritable.*

Stress can '**Disrupt thought processes**' by inhibiting the receipt of information; the ability to solve problems and make decisions; the ability to be creative and retrieve information. Seven items contributed to this factor (items 2, 5, 13, 16, 22, 28 and 32). (Cronbach alpha internal reliability test for this item with N = 2291 was .87).

Item example for this factor: *Had difficulty concentrating for any length of time.*

Medical experts generally agree that many illnesses are stress-related, with each person having particular vulnerabilities with respect to physical ailments, which were responses to stress. So '**Physical illness**' was an important measure of levels of stress being manifested. Seven items contributed to this factor (3, 9, 14, 21, 23, 27 and 31). (Cronbach alpha internal reliability test for this item with N = 2291 was .78).

Item example for this factor: *Been tired even when waking up in the morning.*

'**Behavioural indications**' are signs of changes in behaviour that can be observed and recognised more easily, particularly by other people. An over stressed person may desire to escape, by avoiding contact with people. Such responses will include poor sleeping habits, excessive drinking or eating, loss of appetite, missed appointments, lateness, avoiding contact with people, time off work or changed driving behaviour. Seven items contributed to this factor (items 6, 12, 17, 20, 26, 30 and 33). (Cronbach alpha internal reliability test for this item with N = 2291 was .66).

Item example for this factor: *Found your eating patterns have altered.*

‘Positive reactions’ were those where the effects of stress can be positive, where there can be feelings of being full of energy and enthusiasm and being able to accomplish much greater volumes of work than usual but this should not be allowed to continue for long periods of time as burn-out is likely to result. Six items contributed to this factor (items 4, 7, 15, 19, 24 and 35). (Cronbach alpha internal reliability test for this item with N = 2291 was .67).

Item example for this factor: *Been achieving far more work than usual*

The results from this scale were not presented in this report for reasons of limited space and because it appeared that the measure somewhat overlapped the measures presented under coping strategies, but the analysis of these variables can be found in the appendix B8.

4.7 Life Events Scale

The fourth scale was the Holmes and Rahe (1967) ‘Life Events Scale’ (also known as the Social Readjustment Rating Scale), which gave a score to every stressful event that was experience in the last year. These experiences mostly involved the person's personal life and where they would experience various degrees of grief due to loss and change. This score and that measured on the work stress scale would together be a measure of the total stress being experienced by that individual. For this questionnaire the subjects were required to just tick which stressful life event had occurred to them in the last year. This measure was scored as directed by Homes and Rahe, as each item was weighted differently. The higher the score the greater the stress indicated. The scores recorded for each subject were then summed to give an overall score for the total score for the stress experienced during the last year for that subject.

Item example for this scale: *Death of spouse/partner* (score = 100).

The results from this scale were not presented in this report for reasons of limited space, but can be found in the appendix B10.

4.8 Coping measure

This scale looked at the ways in which the subjects responded to their stress. This scale was taken from a large study on stress amongst health workers (Hammond et al, 1992). However, a number of items were added to examine the frequency of responses where the individual might choose to talk to someone about their problems i.e. their GP, a private

therapist or the organisation's counselling service. The original coping model scale was devised by Lazarus and Folkman (1984). It suggested a variety of coping strategies and the scale derived from factor analysis of the data within the Hammond et al study echoed these. The scale aimed to examine the following coping response styles:

Rational actions

This reflected a style that involved coping with stress by adopting a strategy of rational actions which may be considered a healthy process. An example of this kind of strategy is to break the problem into smaller parts and tackle each one in turn or separately. Six items contributed to this factor (items 1, 3, 8, 17, 26 and 34). (Cronbach alpha internal reliability test for this item with N = 2291 was .57).

Item example for this strategy: *Pass work onto others as much as possible.*

Palliative actions

The palliative action option may be less healthy since it does not involve a direct attempt to approach the source of the stress. An example of this kind of strategy is to take comfort in other things such as watching television, or using a displacement activity such as a hobby. Five items contributed to this factor (items 2, 6, 9, 23 and 33). (Cronbach alpha internal reliability test for this item with N = 2291 was .53).

Item example for this strategy: *Try to forget it by working at my hobbies.*

Social support

Seeking social support is possibly a more healthy strategy and may include such actions as involving fellow workers in the problem or talking things over with a friend. But this response could also be seen as avoidance response, in that the subject could choose to become involved in other social activities to distraction their attention away from work stress. But this may serve to lessen the perception of stress at work by reappraising its importance and by achieving better work/life balance. Ten items contributed to this factor (items 4, 10, 12, 14, 18, 21, 24, 30, 31 and 36). (Cronbach alpha internal reliability test for this item with N = 2291 was .71).

Item example for this strategy: *Talk things over with a friend.*

Depressive response

Depressive response is seen as an unhealthy response. In this case the problem becomes internalised or 'bottled up' and the individual develops a feeling of powerlessness or not feeling in control. This manifests itself by affective symptoms such as loss of sleep, becoming withdrawn and lethargic. It is arguable whether this internalisation is actually a coping strategy rather than an indication of the failure to cope. However, depressive response can be a learnt response from models in families, of ways to deal with difficulties, so it may be said to be a learnt dysfunctional coping response. Six items contributed to this factor (items 5, 13, 22, 27, 29 and 32). (Cronbach alpha internal reliability test for this item with N = 2291 was .75).

Item example for this strategy: *Get depressed.*

Emotive response

Emotive response, i.e. expressing emotions under stress is seen as possibly healthy within limits. Certainly suppression of emotion may lead to psychological and physical ill-health (Grossarth-Maticek et al, 1985); but excessive emotional expression is also associated with physical illness (Smith and Pope, 1991), not to mention the effect that this might have on peers at work or family or spouses. A positive example of this coping strategy will be to express ones feelings to those who may have been responsible for the stress. Four items contributed to this factor (items 7, 16, 25 and 35). (Cronbach alpha internal reliability test for this item with N = 2291 was .58).

Item example for this strategy: *Complain to the people responsible.*

Passive response:

The passive response is an unhealthy strategy as the individual simply accepts the stressful situation and lets things happen without attempting any intervention. Examples could be taking time off work or having a drink to try to forget about it, hoping it will go away by itself. Six items contributed to this factor (items 11, 15, 19, 20, 28 and 37). (Cronbach alpha internal reliability test for this item with N = 2291 was .39).

Item example for this strategy: *Simply give in and wait for the inevitable.*

Further scales were added to the questionnaires distributed to the counselling clients which were not present in the 'Well-being' study.

4.9 Mental Health Scale (MHI5) of the SB166 Short-Form Health Survey

The MHI-5 has been in use for several years as part of the SB166 Short Form Health Survey (e.g. Jenkinson et al., 1997; Schneider and Varghese, 1995; Stewart et al., 1988) and on its own as a measure of mental health (e.g. Berwick et al., 1991). Its development, reliability and validity have been well documented and the SF-36 Health Survey Manual provides a synopsis of this evidence (Ware et al., 1993). The SF-36 Health Survey Manual contains norms for the general populations of the US and UK, together with normative data for various medical conditions including hypertension, congestive heart failure, diabetes, myocardial infarction and clinical depression, although not for a screened non-distressed population.

It has been claimed that, perhaps the most impressive results of the MHI-5 pertain to its validity in discriminating psychiatric patients from those with other medical conditions ... 'MHI-5 discriminated between patients with major depression, severe affective disorder, and anxiety disorders identified by the diagnostic interview schedule as well as or better than ... three longer scales'.. (Ware and Sherbourne, 1992).

In addition, high internal consistency reliabilities have also been reported by studies citing Cronbach alphas ranging from around 0.82/3 (e.g., Random sample of UK population, N=9,332, Jenkinson et al., 1993a and 1993b; mail survey random sample of US population, N=1,692, McHorney et al., in review) to 0.95, (e.g. UK general practice, population, N=1,582, Brazier et al., 1992), though in this study Cronbach alpha for this measure was .54 with N = 305. Reported effect size (Ware et al., 1993, SF-36 Health Survey Manual, pp.9:21 to 9:23) of the mental health scale was 1.65, where effect size equalled the difference between minor medical group and group with serious psychiatric conditions divided by the standard deviation of the general population.

The mental health subscale, the MHI-5, consists of five items measuring mental health in terms of psychological distress and emotional well-being on a six point scale (1-6, None of the time - All of the time) measuring the intensity/frequency of clients emotional feelings over the previous month. It includes one or more items from each of the four major mental health dimensions (anxiety, depression, loss of behavioural or emotional control, and psychological well-being) confirmed in factor analytic studies of the full length 38 item MHI from which the MHI-5 was derived.

When scoring the MHI-5 in the present study items were first coded on a 1 to 6 scale, 1 = None of the time and 6 = All of the time. All items are then re-coded so that a high score indicated better mental health. Therefore, a subject feeling blue - none of the time = has their original score recoded from a 6 to a 1, but a subject feeling happy and calm - all of the time = keeps his/her originally given score of 6. Therefore items 1, 2 and 4 had to be recoded. After item recoding, the score on each item was summed to form the raw score of the scale (Ware et al., 1993). The raw score of the MHI-5 scale was then transformed to a scale of 0-100 using the formula outlined below taken from the SF-36 Health Survey Manual (Ware et al., 1993), given that the lowest possible score=5, the highest possible score=30 and the possible range=25.

SF-36 Transformed scale = SF transforming = $(x-5)4$

This transformation converts the lowest and highest possible scores to zero and a hundred respectively. Scores between these values represent the percentage of the total possible score achieved (Ware et al. 1993, SF-36 Health Survey Manual). Transformed scores can then be compared with previously published norms which use transformed scores (Jenkinson et al., 1997; McHorney et al. 1992).

As the mental health rating was not made during stage 1, the 'Well being' study to get a normative scores to use in stages 2-4, the norm used was taken from a study of the general public in the United Kingdom (mean=74.07, s.d.=17.07, N=8204) by Jenkinson et al. (1997).

This scale asked: *How much during the last week have you...*

Item example: *been a very nervous person?*

4.10 Work Functioning scale

How much impact mental health services have on the employee's capacity to contribute to work-related productivity and profitability is a key issue for purchasers and managers of mental health services. A number of studies have reported the effects of mental health problems on work functioning e.g. Wells et al. (1989) and the effects of mental health interventions in helping to restore work functioning (e.g., Firth and Shapiro, 1986; McDonnell Douglas Corporation EAP Audit (1989a); Mintz et al. (1992)).

The Work Functioning scale (WFS) is a self-reporting measure that assesses perceived self-efficacy or capacity to engage in work behaviours. It is a five item scale taken from the Howard, Lueger and O'Mahoney (1991) Current Life Functioning scale. Lueger and Howard further found that the work functioning of psychotherapy patients reported internal reliability of $\alpha = 0.84$ ($N = 434$) and a test-retest reliability of 0.84 ($N = 92$). In this study Cronbach alpha for this measure was .79 with $N = 305$. In addition, they found moderate evidence for the concurrent validity with other measures, based on correlations between WFS scores and patients symptomatic distress ($r = 0.56$), SCL90 Checklist score (Derogatis, 1977); and clinician's ratings of global functioning (r ranging from 0.01 to 0.58), measured by the Global Assessment scale (Endicott et al., 1976) and the Level of Functioning scale (Carter and Newman, 1981).

For each item on the five item work functioning scale clients were asked to indicate on a five point scale (1 = Not at all, 2 = A little bit, 3 = Moderately, 4 = Quite a lot and 5 = Extremely) how much their emotional or psychological problems interfered with different aspects of their work functioning (i.e., ability to perform routine tasks at work, interactions with other people at work, ability to concentrate or complete tasks at work, performance at work, and developing and managing their job). In the present study, clients were asked to state both their work and personal problems and therefore the instructions were slightly modified by asking clients to rate how much their problems, instead of their emotional or psychological problems, interfered with their work functioning. Each item of the scale was scored and the mean score for the scale was calculated, the higher the mean score the worse the work functioning.

As the work functioning scale was not used during stage 1, the 'Well being' study, to get a normative scores to use in stages 2-4, the norm used was taken from a similar study in the United Kingdom (mean= 1.94, s.d.=0.84, $N=808$) by Worrall,1999).

This scale asked: *How much your problems interfered with each of the work functions stated:*

Item example: *With my ability to perform routine tasks at work.*

4.11 Personal Functioning

This was designed to compliment the work functioning scale and was a self-reporting scale that consisted of two items assessing how client's problems interfered with their home life

and personal relationships. The personal functioning scale used the same scale as the work functioning scale, for each item clients were asked to indicate on a five point scale (1 = Not at all, 2 = A little bit, 3 = Moderately, 4 = Quite a lot and 5 = Extremely) the extent to which their problems interfered with their personal functioning. Again, each item of the scale was scored and the mean score for the scale was calculated, the higher the mean score the worse the personal functioning.

As the personal functioning scale was not used during stage 1, the 'Well being' study, to get a normative scores to use in stages 2-4, the norm used was taken from a similar study in the United Kingdom (mean= 2.23, s.d.=0.99, N=810) by Worrall,1999). In this study Cronbach alpha for this measure was .83 with N = 236.

This scale asked: *How much your problems interfered with each of the work functions stated:*

Item example: *with my personal relationships.*

4.12 Measure of 'Presenteeism'

Finally respondents were asked to rate how effective/efficient they felt they were at work. This was to be used as a subjective estimate of 'presenteeism' which would be matched against their salary and hence a figure could be produced for the estimated cost of their reduced performance arising out of the stresses they were experiencing. This figure together with the figure produced when computing sickness levels with salaries, will give a total figure for the estimated cost of stress to the council when extrapolated from the sample size. The respondents were also asked about their awareness of the staff support services (EAP) on offer, whether they minded being followed up at a later stage and were given an opportunity to give any comments they might wish to make. To measure the level of 'presenteeism' the subjects were asked to score themselves on a scale of 0% to 100% how effective/efficient they felt they were being at present at work.

4.14 Effect sizes and clinically significant and reliable change

Effect sizes have been widely used in psychotherapy outcome research as an index of magnitude of effect. The method utilised to calculate effect size was based on a comparison of pre- and post- counselling scores (Kazdin, 1994) and is outlined below together with the effect size for each outcome measure used. Es was calculated by Kazdin who proposed effect size estimate (augmented to increase power) based on pre- and post measure scores, $Es = m_2 -$

m_1/sd (for baseline norm or the norm in other studies) where m_1 = pre-counselling mean, m_2 = post-counselling mean. This was further extended to look at the Es at the follow-up stage also. In this case m_2 = follow-up mean. The effect size also allows for an examination of the proportion of subjects who have improved (Andersen and Lambert, 1995).

Another frequently adopted criterion for measuring change in psychotherapy studies is the use of clinically significant change. It has been pointed out that statistical difference can be achieved between pre- and post-therapy via a small degree of change if that change was experienced by most clients. This was seen as unlikely to be of value either to the client or to the practitioner (Mullin et al, 2006). Thus the concept of clinically significant change was used. This is a concept widely used within psychotherapy studies for the measurement of clinically meaningful client change (Jacobson et al, 1984, 1986; Jacobson and Revenstorf, 1988; Jacobson and Truax, 1991). Jacobson and Traux define clinically significant improvement as clients entering therapy as part of a dysfunctional population and by the end of therapy they are no-longer part of that population or are part of the normative population. While a mean might change through the stages of the study and the change between stages can be significant, and this would be seen as a 'Reliable Change Index' (Mullin et al, 2006), if that mean does not reached a level where it was no longer significantly different from the norm, it cannot be said to have gone through clinically significant change (Mullin et al, 2006). Jacobson and Traux's outlined two statistical criteria for the assessment of clinically significant change for individual cases.

The first criterion assesses whether or not a client's post-therapy score represents a clinically significant outcome in terms of whether or not it falls within the functional population range (i.e., above the cut off score delineating functional and dysfunctional populations). They propose three different definitions of clinically significant outcome: (a) Client's post-intervention score moves outside the range of the dysfunctional population on the measure in question; (b) Client's post intervention score represents a return to normal functioning i.e., moved inside the range of the normal population; (c) Client's post-intervention score is more likely to be in the functional than the dysfunctional population. They also propose three different methods of calculating each definition's respective cut off score.

The present study considered the use of definition (b) to be the most appropriate as this best fits our conceptualisation of a significant outcome as being that of returning clients to normal levels of functioning where their mean scores are no longer significantly different from the baseline norm (as taken from the 'Well-being' study) or the norm as obtained from other

studies (as per mental health, work and personal functioning). Criterion (b) defines successful outcome as ‘the level of functioning subsequent to therapy should fall within the range of the functional or normal population, where range is defined as within two standard deviations of the mean of that population’.

Though Barkham et al. (1996) noted that general population will include some individuals with clinically significant levels of functioning (particularly within this study which used the same population from which the counselling subjects came). They therefore propose the use of a tighter threshold for estimating the limit of the functional population, where the range is defined as within one standard deviation of the mean of the general population. Thus much of the present study focussed on whether the mean score for a particular variable for the various groups examined was originally (pre-treatment) significantly different from the normative baseline mean (or the norm) and whether after counselling (post-treatment and follow-up) the resulting means fell within the normative range i.e. was no longer significantly different from the normative baseline mean, i.e. was within the range of one standard deviation of the mean of the normative population.

For clients to be classed as showing clinically significant change they must have, at the start of counselling, scores considered within the range of the dysfunctional population i.e. outside the range of one standard deviation of the mean of the normative population, and end of counselling scores within the range of the functional population i.e. within the range of one standard deviation of the mean of the normative population. Further, clients must also fulfil a second criterion of reliable statistical change.

The criterion of reliable statistical change takes into account the reliability of the outcome used when assessing whether the amount of change is significant. This is measured by examining whether the post-treatment condition has move at least one standard deviation (as defined by the normative population) away from the pre-treatment score and towards the functioning populations mean i.e. that of the normative population. In general, this is seen as a less reliable measure of change but the greater the difference between pre-therapy and end of therapy scores the more reliable the measure of change (Jacobson and Truax, 1991).

4.15 Questionnaire distribution

Stage 1:

The questionnaires were distributed in July, 1996 to the Social Services department and to Central Services of Norfolk Council. In October, 1996 the same questionnaire was distributed to the Education department. These were sent out later as it was felt that July, coming just prior to school holidays would not be a good time to obtain a fair response rate. All the questionnaires were sent out with a two-page letter of explanation signed by the Director of Personnel (See appendix F: questionnaires (B14)). The number of questionnaires sent out was decided by various factors. It was agreed that in order to receive a sufficient response rate for analysis at least 240 questionnaires would need to be randomly distributed among the larger departments. Where sectors had less than that number of employees all members of the sector/directorate were sent a questionnaire. All respondents were assured of the confidentiality of their responses and were asked to put them into s.a.e. to be sent directly to Keele University. Just fewer than 5300 questionnaires were distributed. (See appendix B for full analysis).

4.16 Pre-treatment questionnaire (client assessment)

Stage 2

The next stage of the research focussed on the clients coming for counselling. The objective was to have all these clients complete a questionnaire prior to treatment. This questionnaire was based on the 'Well-being' study questionnaire so that the latter would act as the baseline or normative measurement. The pre-treatment questionnaire included a number of additional questions which had formally been part of the service monitoring questionnaires. These included, the number of visits they had made to their G.P. in the last three months, were they prescribed medication, requesting the clients' views of the service, an assessment of levels of functioning at work, mental health measure, levels at which the complaint bothered the client and also an opportunity for the client to identify problem categories, within and outside of the working environment. The goal was to have this questionnaire given/sent to the client prior to treatment. However, this proved not always possible, so the clients were also asked if they had filled in the questionnaire before or after their first session.

A letter explaining the purpose of the questionnaire again accompanied each questionnaire and which encouraged the clients to complete the questionnaire and to send it to Keele University (see appendix F: questionnaires (B14)). They were also told at this point that they would receive two further questionnaires. Each questionnaire was to be anonymous

but each client was identified by their case number and counsellor so that further questionnaires could be sent after treatment and at the 6-month follow-up period and so that their post-treatment and follow-up questionnaires could be matched against their pre-treatment (client assessment) questionnaire.

4.17 Post-treatment questionnaire

Stage 3

This questionnaire was either given to the clients by their counsellor when they finished seeing them, with the explanatory letter (see appendix F: questionnaires {B14}) and a stamped addressed envelope for the form to be sent to Keele University; or if the clients did not return for their final session the counsellors were asked to fill out a form which they returned with their closed case notes stating that they had not been able to give the clients the post-treatment questionnaire (see appendix F: questionnaires {B14}). On receiving this form the administration at EAP provider head-office were instructed to send this questionnaire out to the client, again with the explanatory letter (see appendix F: questionnaires {B14}) and with the client's case number and counsellors name written on the form to identify the client and to be able to match the post-treatment questionnaire with the pre-treatment (client assessment) questionnaire.

Stage 3: Post-treatment questionnaire structure

This questionnaire was somewhat shorter than the pre-treatment questionnaire. The post-treatment questionnaire was similar to the pre-treatment questionnaire, but did not ask for any demographic details. It still included the scales measuring the work stress, IIP 32, problems and complaints and coping strategies. The life events scale was not included in the questionnaire. It included, as with the first questionnaire, questions asking for the client's views of the service and their counselling. They also were asked to rate how much their problem worried/bothered or interfered with their work then (work and personal functioning scale), their present mental health state (MHI5) and their levels of effectiveness/efficiency at work after treatment. They were asked to comment in their own words what they gained from the service and how they might improve the service.

4.18 Follow-up questionnaire

Stage 4

This questionnaire was sent out to all clients 6 months after their case notes had been sent in as being officially closed. This questionnaire asked for responses to most of the same

questions and scales that were asked in the post-treatment questionnaire. The objective here was to examine if the responses had changed over the six months, with particular reference to looking at how permanent were the possible positive changes that were presented at the end of therapy i.e. were the changes still of the same order after six months. It was of interest to know if the changes, particularly with respect to coping strategies, continued to show the level of change as seen at the end of treatment as shown by the post-treatment questionnaire.

This questionnaire was also sent out with an explanatory letter and a s.a.e. requesting the questionnaire to be filled out and returned to Keele University (see appendix F: questionnaires {B14}).

4.19 Pre-sessional questionnaire

For a brief period pre-sessional questionnaires were issued. This was a very brief questionnaire, which was to be given to clients prior to their second and subsequent sessions. This contain four key questions from each of the main groups of questions i.e. the questionnaires which looked a work stress, IIP32, problems and complaints and coping strategies. The goal of this was to examine at what stage of treatment was there the most change. But this was run for a very short period and hence the number of complete sets of questionnaires were too small to be of use to the over-all research other than possibly suggest further areas for research development (appendix B23). (The analysis of these is not included in this report).

4.20 Counsellor feedback questionnaire

A counselor feedback form was also used which was given to the counselors after treating the clients asking to answer questions about the diagnosis of the problem they were treating the client for, how many sessions they saw the client for, whether the client improved, etc. This form was returned to the EAP provider's head office where it was analysed by the provider's staff for their reports to the purchaser. This analysis is also not present in this report (for questionnaire – see appendix B24).

5. Stage 1: Baseline normative data from ‘Well-being’ study

5.1 Introduction

This stage of the study was set up to find baseline measures against which to compare the subjects coming for counselling. As the research study was a practice based naturalistic study for ethical and commercial reasons those coming for counselling could not be matched against a control group. Therefore it was decided to look at how the general population within the organisation, from which the counselling subjects came, responded to the same questionnaire. Then the counselling subjects could be compared with this normative data not only with respect to how they differed or not from the normative/baseline sample from the general population within the organisation, but also after treatment how much their scores move towards those of the norm or whether they moved to such a point that the scores were no-longer significantly different from the norm. This would then indicate, for example, clinically significant change if their scores started significantly different from the norm.

The data from stage 1 of the study that were of particular interest for the main core study, that is the stages 2-4, were those concerning the proportions with respect to gender, age and professional status of the respondents within stage 1 so that it can be seen whether those coming for counselling were representative of the general population within the organisation. Further it was of interest to record the sickness levels in order that some comparative calculation can be made with respect to the costs of stress to the organisation as initially measured by looking at the number of days off sick and calculating what that cost with respect to financial loss (as calculated from the employee's salary) to the organisation maybe by way of lost productivity. This cost will be compared with those coming for counselling and from this a calculation will be made with respect to what the savings might be after treatment with counselling in reducing possible stress levels. The changes in scores for ‘presenteeism’ will also be important here in measuring the cost effectiveness of the counselling process.

But the most important data from stage 1 will be the response levels for the measures of stress and coping strategies from the general population with a particular focus on gender, age and professional status differences as this will be the main focus in the reports of the results from stages 2-4 of the study.

This report is based on the findings analysed from the 2291 completed Well-being questionnaires received back from the total of 5295 which was a sample (randomly distributed for large departments) of the 17,614 total work force of organisation being studied. This represented a mean return rate of 43% with no sector going below 27% (see appendix B4).

5.2 Demographic factors

Since a central aim of the research was to examine the relationship between counselling effectiveness and a range of demographic factors, it was necessary to conduct analyses of the baseline data in terms of these factors. Nearly two thirds of the respondents were female. This was not greatly different from the proportion of each gender in the organisation (78.4% females and 21.6% males as supplied by the H.R. department in 2005 who said the proportions have change very little over the last 10 years {see appendix D15} grade group profile).

The proportions of professionals to non-professionals in the sample in each of the genders were fairly similar, and the proportion of males to females in each of the professional status groups was also fairly similar. The proportion of non-professional respondents was about 60% as a whole and within each gender. Further, nearly two thirds of the respondents were female in both of the professional status groups. This was consistent with the proportion of females who responded to the questionnaire as a whole. From the data provided by the H.R. department of the organisation it was found that the mean percentage of females in the non-professional groups was 69.9%, thus the response rate was fairly representative of the organisation's population for this group.

The majority of the respondents fell in the 36-64+ age group both for the men (62.4%) and for the women (67.3%). The age proportions of the respondents seemed to fairly represent the proportions that were employed by the organisation as supplied by the organisation's Human Resources department (see appendix D13).

Nearly a quarter of the sample was part-time, this could possibly be because of the larger percentage of women responding to the questionnaire (63.8%) and a third of those were part-time as compared with only 7.6% of the males. 87% of all the part-timers were females. From the Norfolk data on proportion of part-timers to full-timers issues by the personnel department (appendix D14), the part-timers in the organisation was 59% (in 2005); 34% of the males were part-time, but there were twice as many female part-timers

as there were full-time females. This suggests that the sample may not well represent the proportion of part-timers as existed in the organisation. However, as the Norfolk data was for the year 2005 and the study was carried out in 1996 then the proportion could possibly have changed given the change of legislation regarding the rights of part-time working which came in force in 2003.

5.3 Days off sick

The number of days sick taken by particular groups is important not only to allow for the cost of sickness to be calculated but also for comparisons to be made with those who come for therapy. The main interest here was in comparing the genders, but it was also interesting to note differences in taking time off sick between professional groups as this will have relevance with respect to the cost of sickness for particular professional/gender groups.

Table 5.3.1 Days off sick during the last year – Professional status x gender

Professional status			
Sickness means	Females	Males	All
Professional	5.53	5.36	5.47
Non-professional	7.43	4.74	6.68
Total	6.70	5.00	6.08

Table 5.3.2 Comparing means between males and females – Days off sick

	t	df	sig. (2-tailed)
How many days sick leave last year?	-2.492	2197	.013

From table 5.3.1 can be seen that the females took 1.3 times more days off sick during the last year than the males. The non-professionals took 1.2 times more days off sick than the professional workers. The non-professional females took 1.3 times more days off in the last year than the professional females. But the non-professional females took 1.6 times more days off sick than the non-professional males. These figures, particularly with reference to the professional/non-profession and genders differences will have bearing on the relative costs of sickness, to the organisation, of the different groups. From table 5.3.2 it can also be seen that the females took significantly more days off sick than the males at $p<.05\%$.

5.4 Measure of ‘Presenteeism’

‘Presenteeism’ is the concept which endeavours to measure how effective/efficient an employee feels they are being at work. The proposal here is that there could be a relationship between the respondent’s subjective reporting of their level of effectiveness at work and the level of stress that they are experiencing. It is also a recognition that looking at sickness levels does not take into account the fact that an employee might be very stressed but on cultural, ethical or moral grounds will ‘soldier on’ and not take time off sick, but their reduced productivity may still be a cost to the organisation. Again like the cost of sickness, the professional status of the subject will affect the relative cost of presenteeism. Further, this data will again be matched against those coming for counselling and also to examine whether the level of presenteeism, had risen as a result of the counselling, as the higher the presenteeism the better performing the subject is and by implication the more productive the employee is. It was also seen as important to compare the genders with respect to presenteeism.

Table 5.4.1 Percentage effectiveness/efficiency at work – ‘Presenteeism’

Professional status Presenteeism - means	Female	Male	All
Professional	76.15	74.91	75.68
Non-professional	81.21	77.14	79.78
Total	79.26	76.23	78.16

Table 5.4.2 Comparing means between males and females – Presenteeism

	T	df	sig. (2-tailed)
How efficient/effective do you feel at work	-5.222	2237	.000

The above table 5.4.1 shows the relative scores for how the subjects rated their effectiveness/efficiency at work on a scale of 0% - 100%. The higher the score the more effective/efficient the subjects feel they are performing at work. The males rated themselves as working to a lower level of presenteeism than the females by a ratio of 1.04. Professional employees rated themselves as working to a lower level of presenteeism than the non-professional workers by a ratio of 1.1. Male professional employees rated themselves as working to a lower level of presenteeism than the non-professional male workers by a ratio of 1.03. Female professional employees rated themselves as working to a lower level of presenteeism than the non-professional female workers by a ratio of 1.07.

Among the professionals the male professional employees rated themselves as working to a lower level of presenteeism than the professional female workers by a ratio of 1.02. Further, as would be expected the professionals earned significantly more than the non-professionals, irrespective of gender, but more importantly the males in both professional groups earned significantly more than the females (see appendix B). All of the above will have relevance with respect to the cost of stress in the work place irrespective of whether the lower performing employee actually goes off sick and because the relative costs will depend on the employee's salary level. Table 5.4.2 indicates, in comparison to days off sick where it was the females who took significantly more days off sick, in the case of presenteeism it was the males who rate themselves as performing at levels significantly lower than the females at $p < .001$.

5.5 Work stress

The main focus and reason for the stage 1 study was to obtain the baseline normative scores for the subject's response scores for the various stress factors below. The higher the score the more stressful the factor is seen to be. The raw score for each item was recorded, then those that related to a particular factor were summed and the total was then divided by the number of items in that factor. The only item that recorded a relatively low internal reliability score using Cronback's alpha was the factor titled 'Relationships with others' (.56), this may have been because of the need for a briefer questionnaire only two items within this factor was used. The main function for reproducing this data is to be able to make comparisons with the stage 2-4 subjects (that is, the counselling clients). It was also considered useful to record in the results the gender, age and professional status comparisons as these will be of interest when looking at the stage 2-4 subjects and to observe if there were any critical differences between the genders, age and professional status groups. Presented below were the mean scores for the 'Well-being' sample for each factor. These scores will act as baseline or normative figures against which to measure the results from the subjects coming for counselling and to provide the standard deviation data for the calculation of the effect size of the treatment. When the results were comparing groups, it was assumed that there was equal variance.

Table 5.5.1 Work stress x gender

Gender	Factors intrinsic to job	Managerial role	Relationship with others	Career and achievement	Organisation structure and climate	Home/work interface	Total work stress at work
	Mean N (sds)	Mean N (sds)	Mean N (sds)	Mean N (sds)	Mean N (sds)	Mean N (sds)	Mean N (sds)
Male	2.14 826 (.82)	1.86 826 (.76)	1.62 825 (.76)	2.44 825 (1.21)	2.33 826 (.95)	1.72 827 (.68)	2.02 827 (.65)
Female	1.98 1458 (.87)	1.68 1453 (.78)	1.48 1454 (.71)	2.18 1451 (1.19)	2.10 1456 (.97)	1.72 1457 (.73)	1.85 1458 (.69)
Total	2.04 2284 (.86)	1.75 2279 (.78)	1.53 2279 (.73)	2.27 2276 (1.2)	2.19 2282 (.97)	1.72 2284 (.71)	1.91 2285 (.68)

Table 5.5.2 Comparing means between males and females

Comparing males with females	T	df	sig. (2-tailed)
Factors intrinsic to the job	4.503	2282	.000
Managerial role	5.272	2277	.000
Relationships with others	4.312	2277	.000
Career and achievement	4.971	2274	.000
Organisational structure and climate	5.545	2280	.000
Home/work interface	-.057	2282	.955
Total work stress	5.544	2283	.000

The above results tables indicated differences in the experience of stress between the genders. Men seem to experience significantly more stress than the women in all the factors ($p < .001$) except for stress arising from 'Home/work interface'. Thus the males in the organisation studied would seem to suffer from more occupational stress than the

women. The factors that seemed provide this organisation's staff with the most stress were 'Factors intrinsic to the job'; 'Career and achievement' and 'Organisational structure and climate'. Generally, however, the ranking of the areas which caused the most stress to that which created the least was very much of the same order for both men and women.

The standard deviations have been included in table 5.5.1 as this data will be needed for the calculation of the effect size of the change between the pre- and post-treatment stages (stages 2 and 3) or between the pre-treatment and follow-up stages (stages 2 and 4).

The above work stress factors were examined for correlations with the number of days off sick. When all the subjects were examined together the number of days off sick correlated positively (mostly $p < .01$) with increases in stress from all the work stress factors except 'Factors intrinsic to the job'. However, when the males were examined separately, none of the work stress factors correlated with days off sick. When the females were examined separately, their number of days off sick correlated with all the work stress factors (mostly $p < .001$; Home/work interface = $p < .01$) including 'Factors intrinsic to the job' ($p < .05$) and as above shows the females took significantly more days off sick than the males. So even though the males suffered significantly more stress than the females, the females' stress correlated with days off sick. The levels of presenteeism for all and each of the genders separately correlated negatively with all the work stress factors. (See appendix D8: tables D8.1-3 and 32-34). The point of showing the correlation is to indicate that there are relationships between stress and sickness level, or levels of presenteeism. The point here is that if a relationship exists then reducing stress will have a knock-on effect in possibly reducing days off sick and raising presenteeism thus saving the organisation lost productivity which is the result of sickness or lowered presenteeism. But the important issue here is that 'days off sick' correlated only with the total stress arising from the work place for the females.

Table 5.5.3 Work stress x age groups 16-35 and 36-64+

	Age groupings	N	Mean
Factors intrinsic to the job	16 – 35	571	1.9024
	36 – 64+	1678	2.0788
Managerial role	16 – 35	570	1.6123
	36 – 64+	1675	1.7903
Relationships with others	16 – 35	570	1.5965
	36 – 64+	1675	1.5096
Career and achievement	16 – 35	570	2.4658
	36 – 64+	1672	2.1998
Organisational structure and climate	16 – 35	570	2.1867
	36 – 64+	1677	2.1782
Home/work interface	16 – 35	571	1.6210
	36 – 64+	1679	1.7482
Total work stress	16 – 35	571	1.8951
	36 – 64+	1679	1.9140

Table 5.5.4 Work stress x age groups 16-35 and 36-64+ - comparisons

	T	df	sig. (2-tailed)
Factors intrinsic to the job	-4.277	2247	.000
Managerial role	-4.766	2243	.000
Relationships with others	2.448	2243	.014
Career and achievement	4.580	2240	.000
Organisational structure and climate	.181	2245	.857
Home/work interface	-3.709	2248	.000
Total work stress	-.574	2248	.566

As comparisons will be made in the core analyses in stages 2-4 between the responses of the two age groups 16-35 and 36-64+ year olds then it was felt important to see if there were difference in stress levels between these two groups as this might have a bearing on differences in utilisation rates and comparison will be made with respect to whether there were any differences in the age groupings' responses to therapy. Thus it was felt important to examine if there were any differences to start with within the general baseline population.

The original age groups of 16-25 and 26-35 were grouped together as 16-35 year olds as the responses of the two age groups were similar as were those of the older age groups 36-45; 46-55 and 56-64+, so these were grouped together as 36-64+ (*see appendix D22*). It was then felt it would be useful to compare the two larger age groups. Here it was found that there were no significant differences between the age groups with respect to 'Organisational structure and climate' and 'Total work stress'. But there were significant differences between the groups for all the other stress factors. The younger age group experienced significantly higher levels of stress with respect to 'Relationships with others' ($p<.05$) and with 'Career and achievement' ($p<.001$) when compared with the older group of 36-64+. The older group experienced significantly more stress with respect to 'Factors intrinsic to the job', 'Managerial role' and 'Home/work interface' ($p<.001$).

However it seems that the effects of stress differed depending on the gender of the age group. The older males experienced significantly greater stress from factors, 'Factors intrinsic to the job', 'Managerial role', 'Home/work interface' all with $p<.001$; and hence total work stress at significantly higher stress levels ($p<.05$) than the younger 16-35 year old males. (See appendix D1: tables D1.2-7)

On the other hand the older females only experience significantly higher stress levels with respect to 'Managerial role' ($p<.01$), and it was the younger females age 16-35 who experienced significantly higher stress levels for 'Relationships with others' ($p<.01$) and for 'Career and achievement' ($p<.001$). (See appendix D1: tables D1.2-7).

However, when the genders are compared while controlling for age grouping (dividing into the two groups only), it was found that there were few differences between the sexes for the younger age group 16-35. Here it was found that the males had significantly higher stress levels for 'Organisational structure and climate' ($p<.05$) than the females and the females for 'Home/work interface' ($p<.05$) than the males in the 16-35 year old group. But when the older age group 36-64+ was examined the picture was very different. For this group the males had significantly higher levels of stress means for all the factors ($p<.001$) except for 'Home/work interface' where they still recorded higher level for this factor but the difference compared with the females was not significant. (For age comparisons not appearing above see appendix D1: tables D1.2-7).

Table 5.5.5 Work stress x professional status – comparison: means

Professional status	Gender	N	Mean	std. deviation	std. error mean
Factors intrinsic to the job	Professional	879	2.3914	.90698	.03059
	Non-professional	1360	1.8040	.74629	.02024
Managerial role	Professional	878	1.9923	.81254	.02742
	Non-professional	1356	1.5855	.70112	.01904
Relationships with others	Professional	877	1.5758	.73692	.02488
	Non-professional	1357	1.5000	.73322	.01990
Career and achievement	Professional	875	2.2806	1.16139	.03926
	Non-professional	1356	2.2552	1.22541	.03328
Organisational structure and climate	Professional	878	2.3287	.93996	.03172
	Non-professional	1359	2.0857	.97954	.02657
Home/work interface	Professional	879	2.0011	.74924	.02527
	Non-professional	1360	1.5313	.61972	.01680
Total work stress	Professional	879	2.0918	.67314	.02270
	Non-professional	1361	1.7896	.65940	.01787

Table 5.5.6 Work stress x professional status – comparison: significances

Professional status	t	df	sig. (2-tailed)	Mean difference	std. error difference
Factors intrinsic to the job	16.689	2237	.000	.58731	.03519
Managerial role	12.573	2232	.000	.40677	.03235
Relationships with others	2.382	2232	.017	.07583	.03183
Career and achievement	.488	2229	.626	.02541	.05207
Organisational structure and climate	5.822	2235	.000	.24305	.04175
Home/work interface	16.118	2237	.000	.46984	.02915
Total work stress	10.506	2238	.000	.30223	.02877

When the subjects were divided into whether they fell into group of professional workers or non-professional workers, it was found that there was a significant difference between the two groups in that the professional group was significantly more stress than the non-professional group. This applied to all the stress factors for the females on their own and also to the males for most of the factors.

When comparing the genders within each professional group it was found that there was little difference between the genders in their stress levels for most of the factors for the professional group. The exceptions were where the professional males experienced significantly more stress than the professional females for ‘Relationships with others’ and ‘Organisational structure and change’ and the females experienced significantly more stress for ‘Home/work interface’. For the non-professionals, the males experienced significantly higher stress levels for all the work stress factors than the females, including ‘Home/work interface’. Further, among the professionals it was the older 35-64+ professionals who experienced significantly more stress than the 16-35 year old age group, but only for ‘Factors intrinsic in the job’; ‘Managerial role’; ‘Home/work interface’ and ‘Total work stress’. This applied particularly to the males in the older age group. The only significant difference for the female professionals when comparing age groups was that the

older 35-64+ year old professional females experience significantly higher stress for 'Factors intrinsic to the job'. There were no other significant differences.

For the non-professionals it was the younger age group of 16-35 year olds who experienced significantly higher stress for 'Relationships with others'; 'Career and achievement' and 'Total work stress'. When separated into genders the older 36-64+ year old non-professional males experienced significantly higher stress levels for similar factors than the professional males of the same age group, except that there was no significant difference in the 'Total work stress' and the younger age group of non-professional males experienced marginally significantly higher stress for 'Career and achievement'. The non-professional females reflected a very different pattern when the age groups were compared. The older age group of female non-professional experiences significantly higher stress for 'Relationship with others' and 'Career and achievement' and hence 'Total work stress' when compared with the younger age group of 16-35 year olds.

Similarly when looking at a particular professional job, i.e. the managers (there was a sufficiently large number of those marking themselves down as having that job) and when the genders were compared, the only significant difference was that the males experienced significantly higher stress for 'Relationships with others'. For the 35-64+ year old teachers, the males experienced significantly higher stress only for 'Factors intrinsic in the job' and 'Career and achievement'.

Within the professional group of respondents there was no significant difference between the males' and females' levels of sickness and 'presenteeism', this was irrespective of their age group. However, within the non-professional group there were significant differences between the genders. The females had significantly more sickness than the males ($p < .01$) and the males experienced significantly lower levels of 'presenteeism' than the females ($p < .001$). For the age group 16-35 the females had significantly higher sickness rates than the males ($p < .05$) but there was no significant gender differences for level of 'presenteeism' between the genders of this age group. However, for the older age group of 36-64+, the females still had significantly higher sickness levels than the males ($p < .05$) but the males also had significantly lower levels of 'presenteeism' than the females ($p < .001$). When comparing age groups of non-professionals the younger 16-35 year olds responded with lower levels of 'presenteeism' than the older 36-64+ year olds ($p < .05$), this applied only to the females of that group ($p < .01$). Thus comparing professional respondents with the non-professional ones, the professional respondents showed significantly lower levels

of 'presenteeism' ($p < .001$) but there was no significant difference overall with respect to sickness levels. The levels of 'presenteeism' applied to both the males and females ($p < .05$ and $.001$, respectively). (See appendix D1: tables D1.44-58).

With respect to 'weekly alcohol intake' only a few of the work stress factors correlated with this for the professional respondents. As a whole group only 'Career and achievement'; 'Organisational structure and climate' and 'Total work stress' correlated with 'weekly alcohol intake' ($p < .05$). For the males on their own the only correlation was with 'Career and achievement' and for the females with 'Factors intrinsic to the job'. The situation was rather radically different for the non-professional group as a whole where all the work stress factors correlated with 'weekly alcohol intake' except for 'Home/work interface' (mostly with $p < .01$). The females were completely responsible for this as all the work stress factors correlated with 'weekly alcohol intake', whereas for the males none of the work stress factors correlated significantly with this variable.

Thus, it would seem that the only time when the males experienced significantly higher stress levels throughout the work stress factors than the females, was when they were 36-64+ and in the non-professional group. Therefore the gender differences did not really exist, even when controlled for age, for those in professional posts, even though the professional group experienced significantly more stress than the non-professionals. But there were significant differences for all the work stress factors for the older 35-64+ age group of the non-professional, when comparing the genders. Here it was found the males experiences significantly more stress than the females in this group and showed lower levels of 'presenteeism'. But the females showed higher sickness levels and their levels of stress for all work stress factors correlated significantly with their 'weekly alcohol intake'. This applied to both the age groups of non-professional females (see appendix D1.).

When comparing full-time with part-time workers for stress levels in the various factors, it was found that part-timers experienced significantly lower levels of stress with $p < .001$ for all factors. This was independent of gender and for the most part of age (see appendix D1: tables D1.14-15).

(For more detailed analysis of the 'Well-Being' study – stress results – see appendix B6 and D1)

5.6 Coping strategies

The baseline scores of the organisation's coping strategies was of particular interest as it will be against this data that changes within the counselling group will be matched on the assumption that the main work of the counsellors will often focus on facilitating the subjects in working on changing their coping responses/strategies. It will also be of interest to see if changes in coping strategies correlated with changes in the experience or perceptions of stress. Hence it is seen as relevant to examine in what ways coping strategies as define here correlated with stress factors, sickness and presenteeism for this baseline normative population. The higher the score for the factor the more relevant the strategy was to the subject. Thus the higher the scores for 'Rational action'; 'Palliative' response and the use of 'Social support', indicates the use of more positive coping strategies. The higher scores for the other three coping strategies indicated that the subject was using less constructive coping responses. So the first three strategies will be expected to have negative correlations or at least a negative relationship with each of the latter three coping strategies. In fact only 'Rational action' had a negative correlation with 'Depressive' response and the use of 'Social support' had a negative relationship with 'Depressive and Passive' responses (see appendix B9 and C4).

Table 5.6.1 Coping strategies x gender – means

Gender		Rational action	Palliative response	Social support	Depressive response	Emotive response	Passive response
Male	mean	2.89	2.66	2.12	2.51	1.92	2.25
	N	821	821	819	822	819	821
	sd.	.72	.82	.64	.87	.71	.59
Female	mean	2.82	2.91	2.33	2.66	2.26	2.17
	N	1436	1432	1437	1433	1427	1430
	sd.	.76	.80	.64	.92	.86	.57
Total	mean	2.85	2.82	2.25	2.61	2.13	2.20
	N	2258	2254	2257	2256	2247	2252
	sd.	.75	.82	.65	.91	.82	.58

Table 5.6.2 Coping strategies x gender – significances differences

Gender differences	t	df	sig. (2-tailed)
Rational action	2.315	2255	.021
Palliative response	-7.105	2251	.000
Social support	-7.672	2254	.000
Depressive response	-3.664	2253	.000
Emotive response	-B9.655	2244	.000
Passive response	3.079	2249	.002

Table 5.6.3 ‘Presenteeism’ Correlated with Coping Strategies

How efficient/effective do you feel at work?		Rational action	Pall. resp.	Social support	Dep. Response	Emotive response	Passive response
All	Pearson corr.	.131(**)	.036	.042(*)	-.316(**)	-.117(**)	-.187(**)
	Sig. (2-tailed)	.000	.093	.047	.000	.000	.000
	N	2218	2215	2218	2218	2212	2213
Males	Pearson corr.	.137(**)	-.033	.061	-.356(**)	-.089(*)	-.228(**)
	Sig. (2-tailed)	.000	.341	.082	.000	.012	.000
	N	812	812	810	813	810	812
Females	Pearson corr.	.135(**)	.052	.001	-.313(**)	-.173(**)	-.152(**)
	Sig. (2-tailed)	.000	.053	.971	.000	.000	.000
	N	1405	1402	1407	1404	1401	1400

From the above table 5.6.2 it can be seen that there were significant differences between the genders in their responses for all of the coping strategies mostly with $p < .001$. For ‘Rational actions’ and ‘Passive’ response it was the males who had the significantly higher means, whereas for the other strategies the females had the significantly higher means. This means that the males were more likely than the females to find positive solutions for their stress or opt for a negative response of inaction i.e. a passive response.

A ‘Passive’ response, for example, would be to drink alcohol hoping the problem would go away as a way to deal with their stresses. In fact for all the subjects together ‘weekly alcohol intake’ did correlated with ‘Passive’ response, this also applied to the males on their own ($p < .001$). But ‘weekly alcohol intake’ for the females correlated with ‘Social support’ ($p < .05$); ‘Depressive’ response ($p < .01$) and ‘Emotive’ response ($p < .001$). (See appendix D8: tables D8.76-98 and summary table B9.13).

When coping strategies were examined with respect to differences between age groups and with the age groups divided into the two age groups 16-35 and 36-64+, the different age groups produced a number of variations in responses (see appendix B9). It was found that the only significant differences were with 'Emotive' response ($p < .001$) and 'Passive' response ($p < .01$) where the younger age group produced significantly higher means.

When the males were compared, it was the younger 16-35 year old males who were significantly more likely to respond to stress using 'Emotive and Passive responses' ($p < .05$ {1-tailed} and $p = .001$ respectively) (See appendix D4: Tables D4.3.1-2). Comparing just the females, it was the older 36-64+ females who produced significantly higher means for 'Rational action' ($p < .05$) and the younger females had a significantly higher mean for 'Emotive response' ($p < .001$). (See appendix D4: Tables D4.4.1-2).

Amongst the younger age group when the genders were compared, it was males who produced significantly different means for 'Rational action' and 'Passive response' when compared with the females ($p < .05$). (See appendix D4: Tables D4.1.1-2). Females aged 16-35 scored significantly higher means when compared with the males for 'Palliative response', 'Social support', 'Depressive and Emotive responses' ($p = .01$; $p < .001$; $p = .01$ and $p < .001$ respectively). For the older age group 36-64+ year olds, the females produces significantly higher mean responses compared with the males for four factors for coping with stress, namely 'Palliative responses', 'Social support' and 'Emotive responses' all ($p < .001$), and for 'Depressive response' ($p < .05$). (See appendix D4: Tables D4.1-2).

When the subjects were divided into whether they fell into group of professional workers or non-professional workers, it was found that there were some significant differences between the two groups in that the professional group showed that they were significantly more likely than the non-professional group to respond to stress with 'Rational actions' ($p < .001$), use 'Social support' ($p < .001$) and with 'Depressive response' ($p = .001$). This applied to both genders and to similar levels for the most part.

These differences seemed to be independent of age, for the most part. The exceptions were for the 16-35 year olds professionals were significantly more likely to respond with 'Palliative responses' ($p < .05$) and 'Passive responses' ($p < .01$) than the 36-64+ age group of professionals; and the non-professionals of this age group were significantly more likely to respond using 'Emotive responses' ($p < .001$). For the professional males (comparing males 16-35 and 36-64+) the only significant difference was that the younger males were

more likely to respond using 'Passive responses' ($p < .01$). For the professional females (comparing females 16-35 and 36-64+) there were no significant differences between the way the two different age groups would respond to stress. With respect to the non-professionals the only gender differences were that the younger males were also significantly more likely to respond with 'Passive responses' ($p < .05$); and the older females were also significantly more likely to respond with 'Rational actions' ($p < .05\%$ {1-tailed}).

When comparing the genders within each age group of professional and non-professional group, there was little difference between the different age groups. For both the females were more likely than the males to respond to their stresses using 'Social support'; 'Depressive and Emotive responses'; the older age group of female professionals were also significantly more likely than the males to use 'Palliative responses' ($p = .001$). Also for the non-professionals there was little difference between the age groups. For both groups the females were significantly more likely than the males to respond with 'Palliative, Depressive and Emotive responses' and 'Social support'. Though the younger males amongst the non-professional group were also significantly more likely than the females to respond with 'Rational actions' or 'Passive responses' (both $p < .01$)

Similarly when looking at a particular professional job, i.e. the managers who were in the 35-64+ age group and when the genders were compared, there were no significant differences between the genders for any of the coping strategies. When the genders were compared for the teachers aged 36-64+, the females were significantly more likely to respond to stress using as coping strategies, 'Social support' ($p < .01$); Depressive response ($p < .05$ {1-tailed} and Emotive responses' ($p < .001$). There were no other differences between the genders. (See appendix B9 and D4: tables D4.1.20-24).

Coping strategies were correlated with the work stress factors. Most of the strategies correlated well with a number of work stress factors. Thus it is easier to state which strategies did not correlate significantly with which stress factors. The coping strategy of 'Rational actions' did not correlate with 'Factors intrinsic to the job; 'Managerial role'. The coping response of 'Palliative action' did not correlate with any of the OSI work stress factors. Further 'Social support' responses did not correlate with 'Factors intrinsic to the job' or 'Managerial role', suggesting people can become stressed at work arising out of these factors and whether or not they use 'Social support' to manage their stress, in other words it does not appear that the use of social supports affects how the subjects felt about their experience of stress arising from these two factors.

When gender differences were examined for all stress factors, the males differed from all the subjects together in that none of the OSI work stress factors correlated with 'Rational action', but for most of them there was a negative relationship with this coping strategy, the same applied to the females but in their case for the following stress factors the negative relationship was significant, 'Relationships with others' and 'Career and achievement' ($p < .01$ and $p < .001$ respectively); and 'Organisational structure and climate' and 'Total stress' ($p < .05$). This suggests as expected that taking rational (positive) actions reduces the experience of stress.

Further, for the males, in direct contrast to all the subjects together, all of the OSI work stress factors (except for 'Home/work interface') correlated significantly and positively with 'Palliative response' (all, $p < .05$, except for 'Managerial role' and 'Total stress', $p < .01$). Whereas for the females, none of the stress factors correlated with 'Palliative response' and the relationship generally was in a negative direction. The other gender differences were found with the correlations with 'Social support'. This coping strategy for the males only correlated with 'Career and Achievement' (negatively - $p < .01$). For the females, this strategy correlated significantly only with 'Home/work interface' (positively $p = .01$). This suggests that as this stressor grew, the more the females made use of 'Social support' as a coping strategy. 'Depressive, Emotive and Passive responses' correlated with all the work stress factors for all the subjects together and for each of the genders separately ($p < .001$), that is as the stress grew so did the coping response of depression, emotive and passive ways for dealing with that stress.. (For above correlations, see appendix D9: tables D9.5-7).

On examining the correlations within the coping scale's factors, 'Social support' did not correlate with 'Depressive or Passive responses'. However, for all the subjects and the males on their own, both these latter strategies show a negative relationship with 'Social support'; whereas for the females, there was a positive relationship. This suggests that the males were less likely to use 'Social support' when they were responding to stress with 'Depressive or Passive responses' than the females. Also 'Emotive response' did not correlate with 'Rational actions', though there was a negative relationship. All the rest of the coping strategies correlated positively with each other, including, surprisingly, 'Passive response' with 'Rational action', (all $p < .001$). However, there are difficulties with the results for 'Passive response' as there was a low internal reliability result for this factor (see appendix B14). The exception was that 'Rational action', not unsurprisingly, significantly correlated negatively with 'Depressive response' ($p < .05$). These patterns also

applied to each of the genders when examined separately, this indicates that the more rational actions were taken the less the experience of depression there was for the subject. (For above correlations, see appendix D9: tables D9.2-4).

The above coping strategies were also examined for correlations with the number of 'days off sick'. When all the subjects were examined together, the number of 'days off sick' correlated positively with 'Social support' ($p < .05$) and 'Depressive and Emotive responses' (both $p < .001$). However, when the males were examined separately, only 'Emotive responses' correlated with 'days off sick' ($p = .01$). Where the females were examined, their number of 'days off sick' correlated with 'Depressive and Passive responses' (both $p < .001$) and 'Emotive response' ($p < .01$), bearing in mind that the females took significantly more days off sick than the males (see B6 on the stress findings). So even though the males suffered significantly more stress than the females, the females responded by using significantly more of the negative coping strategies and these correlated with levels of sickness which was also significantly higher for the females. (For above correlations, see appendix D8: tables D8.27-49).

Further, the levels of presenteeism for all the subjects correlated positively with 'Rational actions' ($p < .001$) and 'Social support' ($p < .05$) and negatively with 'Depressive, Emotive and Passive responses' (all $p < .001$). For the males and females separately the correlations were the same except for 'Social support' which did not correlate at all for either of the genders separately. It is to be borne in mind that the females experienced significantly higher presenteeism than the males, i.e. they functioned better/more effectively at work (see B6 on the stress findings). Interestingly the coping strategy of 'Palliative response' while showing no significant correlation did seem to have a negative relationship with presenteeism for the males, while for the females there was a positive relationship, suggesting that 'Palliative responses' served a different function for each of the genders. The use of this response, such as a hobby or past time enhances the females productivity (increases their presenteeism) while it has the opposite effect on the males or that the males use it more as an avoidance or a distraction from dealing with their stresses at work. (See appendix D8: tables D8.50-52).

Amongst the professionals, overall, 'days off sick' correlated significantly with 'Depressive and Emotive response' ($p < .05$). There was no significant correlation with this variable and any of the coping strategies for the males, and for the females on their own, there was a significant negative correlation with 'Rational actions' ($p < .05$) and a significant positive correlation with 'Depressive response' ($p < .01$). However, for the non-

professionals, overall, nearly all the coping strategies correlated with 'days off sick' with the exception of 'Rational actions' where there was no correlation. This was mostly down to the females as the only coping strategy which significantly correlated with 'days off sick', for the males, was 'Emotive responses' ($p < .05$). For the females all the coping strategies correlated with 'days off sick' except for 'Rational actions' and 'Social support'. (See appendix D8: tables D8.44-50).

With respect to 'weekly alcohol intake', both the professional and non-professional groups showed significant correlations between this variable and 'Passive response' ($p < .01$). For the professional group, the males also showed significant correlation between this variable and 'Emotive response'. However, for the non-professionals, overall there was a significant negative correlation between this variable and 'Palliative response'; and for the females there was also a significant positive correlation with 'Depressive and Emotive responses' ($p < .01$). (See appendix D8: tables D8.93-98).

Thus, it would seem that there was little difference between the age groups and professional status of the respondents in their methods of coping with stress. Here the critical differences seem to be gender specific in that the females were more likely than the males to use 'Palliative, Depressive and Emotive responses' and 'Social support'. There was generally no gender differences in the use of 'Rational actions' or 'Passive responses' except that the younger 16-35 year old males amongst the non-professional group were more likely than the females within those groups, to use these last two coping strategies as a way of dealing with their stresses. Comparing professional with non-professional, the professionals were more likely to use 'Rational actions', 'Social support' and 'Depressive response' (mostly the females). However, with respect to 'days of sick' more of the coping strategies correlated with this variable for the non-professionals, especially the females, this also applied to the correlations between coping strategies and 'weekly alcohol intake'. (For more detailed analysis of the 'Well-being' study – coping strategies results – see appendix B9)

5.7 Cost of stress

Part of the core study (stages 2-3) was to examine how and in what ways the counselling service was cost effective in reducing the stress experienced by the subjects and to be able to put a financial figure to the productivity saving produced by reducing the stress experienced by the subjects. To this end it was important therefore to have some concept of what stress was costing the organisation as a whole and to use the figures obtain as a

measure of what is being saved by the counselling not directly financially but by implication in terms of improved productivity either by reducing sickness levels and/or increasing the level of presenteeism. Below is presented only the findings concerning the overall costs and the differences with respect to gender, as above it is seen that not only do the genders experience stress differently but they use very different coping responses, further the pay scales were significantly different between the genders so the costs of stress between the genders would be expected to be different. This, in its turn, will have a bearing on the relative saving produced by the counselling depending on the gender differences in utilization, and hence the overall cost effectiveness of such a service.

Table 5.7.1 Total cost of stress (in pounds) x gender

Gender		Days sick last year	Cost of sickness	Cost of presenteeism	Stress costs
Male	Mean	4.92	£309.28	£2390.45	£2522.20
	N	804	741	427	409
Female	Mean	6.71	£338.20	£1540.30	£1684.37
	N	1395	1234	628	592
Total	Mean	6.05	£327.34	£1884.67	£2024.12
	N	2199	1975	1055	1001

(The total cost due to stress was calculated by taking the costs due to sickness and using 60% of that figure {as per Kearns, 1986} and adding the resultant figure to the costs of presenteeism.)

(It is well to remember this was at 1996 cost calculations – when the study was carried out; but if this was to be converted then the inflation rate from July, 1996 to December, 2008 can be taken as being 33.90% {InflationData.com}, so all figures would need to be multiplied by this rate).

Table 5.7.2 Total cost of stress (in pounds) x gender – significant differences

	t	df	sig. (2-tailed)
Cost of sickness	-.602	1973	.547
Cost of presenteeism	2.778	1053	.006
Stress costs	2.377	999	.018

The sickness costs were calculated by taking the number of available working days per year (260). This figure was then divided into the annual salary to give the daily salary. The sickness cost was then calculated by multiplying the daily salary by the number of days sick.

The cost of presenteeism was calculated first by recognising that the mean response for the estimated efficiency level was about 80%. This was taken then as the base measure, so any scores above that were excluded and the rest were calculated as fractions of 80 and this fraction was taken away from 1, this would represent the fraction lost in work efficiency (A). The number of days at work for this calculation was calculated as the total number of days at work (260) minus the average number of days leave (30); then the number of days sick were deducted (B). This figure was then multiplied by the fraction lost in efficiency (AxB). This sum was then multiplied by the daily salary. Thus a figure was arrived at that represented an estimate, from the employee's point of view, of what stress at work costs him/her in efficiency or what the lowered productivity is costing the organisation (the county council). The total stress costs were calculated by summing 42.6% of the costs of sickness with the costs of presenteeism (Kearns {1986} suggested that up to 60% of all work absence is caused by stress-related disorders and of that 71% of the stress is seen as work related {Cooper and Davidson, 1982} thus equalling 42.6%).

From the above table 5.7.1 it was calculated that the total number of days off sick for the sample was 13,303 days a year (mean x no. of respondents). Based on this figure an extrapolation to the whole organisation (total work force = 17614) would give a total of lost working days to sickness in a year as being 106,557.1 days.

The figure for the estimated cost of the sickness of the sample was nearly £646,500 (or equivalent to £866,000 in 2008 – see above table 5.7.1). If this figure is extrapolated for the whole organisation's work force of 17,614, this would give a figure of the cost of sickness to the council of £5,178,467 i.e. nearly £5.2 million (or £6.9 million in 2008).

The cost of presenteeism goes even higher. For the sample as a whole the cost was over £1,988,327 (£2,662,000 in 2008). If this figure is extrapolated for the organisation as a whole, the cost of presenteeism is estimated to be £33.2 million (£44.5 million in 2008). Further, from this sample, in the calculation concerning the levels of presenteeism the percentage experiencing levels below the considered norm of 80% performance levels was 27% of the 'Well-being' sample or 33% of the males and 23 % of the females.

Thus the estimated total cost of stress to the organisation was seen as the sum of 42.6% of the cost of sickness and the cost of presenteeism i.e. £2.0 million for this sample (or £2.68 million in 2008). If extrapolated for the whole work force then the figure for the total cost of stress to organisation is estimated at £35.2 million per year (£47.1 million in 2008).

From the table 5.7.1 above it is seen that women estimated that they have more sick leave than men and so they cost the organisation 4.4% more in sickness costs, though the differences in the costs for sickness for both genders were not significant. But the cost of presenteeism was higher in men, costing the organisation 21.6% more than the women. Thus the total stress for the men cost the organisation 16.2% more than the stress costs for the females. So the males' costs for presenteeism and hence total stress costs were significantly different from that of the females ($p < .01$ and $.05$ respectively). (For more detailed analysis of the 'Well-Being' study – stress costs results – see appendix B11)

5.8 Summary

The aim of the analysis reported in this chapter was to extract data information from the Well-being study of stage 1 which will be needed in the analysis of the data from the study into the effectiveness of the brief counselling service as provided through the EAP service. Some of the data extract was in order to be able rate how representative was the counselling sample of subjects as compared with the proportion of those groups examined in the general baseline sample group from stage 1 of the study. Further, the rest of the data extracted from stage 1 will be used as baseline measures for comparing the counselling subjects when they first come to counselling and to see how far they move towards the baseline norms by the end of their therapy or by the 6 month follow-up period.

Thus before summarising the relevant findings from stage 1 it might be helpful to know the areas that will be of interest in the stages 2-4 so the relevance of the stage 1 might be better understood. Firstly it will be of interest in stage 2 to look at who comes to counselling with respect to gender, age and professional status as various claims were shown in the literature review that those who come to counselling per se and those who come to benefit from the service as offered by an EAP are mainly young females and those from the more professional group of employees. However, the key issue here is that information about who comes for counselling is first to know how representative was the counselling group with respect to the baseline normative group from the stage 1 study in order that the key questions can be address, that is, who comes for counselling and are there differences in the counselling effectiveness with respect to the different groups examined. This question concerns whether there are demographic differences in the experience of stress, coping strategies and their ability to make use of counselling to change. The main demographic groups that were of interest were the gender, age and professional status groups. These

comparisons are not well made within the research into the effectiveness of EAP brief therapy. Further an important part of the analysis of the effectiveness of the brief therapy, a part that is important both to the provider and to the purchaser, is whether the service is cost effective, and if so, with whom is it more cost effective.

Hence the results of stage 1 can be summarised as follows. The sample group can be said to represent the work force firstly because the random sample response rate was high at 43%. Further the proportion of males to females, age groups and professional status of the respondents fairly represented the population of each group within the organisation. The only possible problem was that the numbers of part-timer members of staff were under represented particularly amongst the females. This could have been because they were missed out during the distribution of the questionnaires because they were not at work at the time or that they did not feel the need to fill out a questionnaire about stress at work as they did not feel stress themselves, as the finding was that this group of staff in what ever job they were doing (high stress or low stress) experienced significantly less stress in all factors when compared with their full-time colleagues.

The rate of sickness was relevant not only to allow for some calculation with respect to the costs of stress but also to allow for the calculation with respect to the cost effectiveness of the counselling service. The link here will be the relationship between sickness and stress at work. It is hoped that the counselling would reduce the amount of stress experienced and hence have a direct effect on the levels of sickness and thus save the organisation by way of improved productivity. In the examination of the amount of sick leave taken by the baseline sample it was found that the females took significantly more time off sick, particularly the non-professionals females. This will be important when looking at who seeks out counselling and whether the amount of sick leave is a predicator with respect to who comes for counselling. Further, if sick-leave correlates with stress and is seen as a coping strategy, then changes in both should have an effect on the cost effectiveness of the counselling service, bearing in mind that it is calculated that 42.6% of sickness is work stress related (Kearns, 1986; Cooper and Davidson, 1982). The question here is, if the males take considerably less sick leave than the females are they less stress and hence need to use counselling less?

This question is perhaps addressed by the examination of the relative levels of presenteeism as reported by the subjects. The males reported significantly lower levels of presenteeism than the females, indicating that while they take less time off sick for stress,

while at work they are performing at significantly lower levels of effectiveness than the females. This would suggest that the males were not less stressed than the females but used different coping strategies, in that they were staying at work but were not performing well or were not highly productive.

This became clearer when examining the data on the levels of stress as experienced by each gender. While there was no real difference in the relative order concerning which stressors bothered each gender more, it was clear that the males were significantly more stressed than the females for all the stress factors except for 'Home/work interface' where there was no significant difference. The correlating of the stress factors with days off sick validated the relationship between these variables but only in the case of the females.

Another variable not well addressed in the research into the effectiveness of brief therapy is that of age. Thus the difference between the younger age group of subjects (16-35) and the older group of subjects (36-64+) with respect to their responses to stress were examined. As might be expected the younger age group experienced particularly significantly more stress with respect to 'Career and achievement', whereas the older age group experienced significantly more stress with respect to 'Factors intrinsic to the job' i.e. struggled with the complexities of the work; 'Managerial role' – perhaps because they are more likely to have managerial responsibilities; and 'Home/work interface', as they are more likely to have growing families. But there was no difference in the total stress experienced between the age groups. However, the younger age group of males showed few differences when compared with the younger females except that the younger females experience significantly more stress from 'Home/work interface' than the younger males. But when the genders were compared in the older age group, the males experience significantly more stress in all the factors except 'Home/work interface' where there were no gender differences. So while the older males generally experience the most stress both genders struggled trying to get their lives at home and at work balanced, as did the younger age group of females, though this did not seem to worry the younger age group of males as much. This data would suggest that the younger age group of males seemed to be more focussed on their careers than problems of work/life balance.

It would seem that the only time when the males experienced significantly higher stress levels throughout the work stress factors than the females, was when they were 36-64+ and in the non-professional group. The gender differences did not really exist, even when controlled for age, for those in professional posts, even though the professional group

experienced significantly more stress than the non-professionals. But there were significant differences for all the work stress factors for the older 35-64+ age group of the non-professional, when comparing the genders. Here it was found the males experiences significantly more stress than the females in this group and showed lower levels of 'presenteeism'. But the females showed higher sickness levels and their levels of stress for all work stress factors correlated significantly with their 'weekly alcohol intake'. This applied to both the age groups of non-professional females.

When examining the gender differences with respect to coping strategies it was also apparent that there were clear differences in their coping responses to stress. The males tended to use 'Rational actions' and 'Passive responses' significantly more than the females. This latter was confirmed in that the males consumed significantly more alcohol and that alcohol consumption correlated with 'Passive response' only for the males. The females tended to use 'Social supports', 'Depressive and Emotive' responses significantly more than the males. This would mean that the females would use friends for support and advice or become depressed or experience tension and shout at colleagues, family or partners when under stress more than the males.

With respect to age differences in coping strategies as might be expected the younger age group tended to use significantly more 'Emotive responses' i.e. shout or become verbally aggressive, or would use 'Passive response' e.g. have a drink and try to forget about the problem, hoping it will go away. The latter coping response was used significantly more by the younger males and the 'Emotive response' was used significantly more by the younger females when compared with the older age group within each gender.

It would seem that there was little difference between the age groups and professional status of the respondents in their methods of coping with stress. Here the critical differences seem to be gender specific in that the females were more likely than the males to use 'Palliative, Depressive and Emotive responses' and 'Social support'. There was generally no gender differences in the use of 'Rational actions' or 'Passive responses' except that the younger 16-35 year old males amongst the non-professional group were more likely than the females within those groups, to use these last two coping strategies as a way of dealing with their stresses. Comparing professional with non-professional, the professionals were more likely to use 'Rational actions', 'Social support' and 'Depressive response' (mostly the females). However, with respect to 'days of sick' more of the coping strategies correlated with this variable for the non-professionals, especially the

females, this also applied to the correlations between coping strategies and 'weekly alcohol intake'.

Women were seen as taking significantly more time off sick than males, but these women tended to come from the lower paid females, so while the sickness costs of the females when compared with the males was higher the differences were not significant. However, as the level of presenteeism in the males was significantly lower than the females, the males were costing the organisation significantly more than the females due to lower productivity. Overall the total stress cost to the organisation if the data was extrapolated to the whole organisation was calculated to be in the region of £47.1 million (as calculated to be the 2008 equivalent figure taking into account the rate of inflation between 1996 and 2008). This had further implications with respect to the importance that the counselling process is cost effective in reducing the experience of stress by enabling the clients to learn more effective coping strategies and thus saving more in productivity for the organisation than the EAP counselling service is costing the organisation.

All the above gender, age and professional status differences illustrates the importance of examining each factor separately, whether it is for work stress or coping strategies, as one factor can cancel out another when summed together or at least confound the data. Many studies have not been able to do this as the data base was not large enough or representative enough. The large data base produced from stage 1 has made this kind of analysis possible. These differences also underline why it was seen as important that the data for stages 2-4 be examined in this way too, i.e. that it is acknowledged that the experience of stress and the coping strategies for each gender, age and professional status group was different and thus the effects of the counselling may have differing effects on the males as compared with the females within each of these groups. This will be particularly important when examining the change process as a result of the counselling. If there are differences in responses to the different factors then there will possibly be differences in the change process in response to the counselling by the different genders, age and professional status groups. It remains to be seen whether this has implications for how counselling for these groups effects change with respect to these factors or whether the gender/age/professional status stress differences will affect how much such groups utilise and respond to the service.

Thus in conclusion the data from stage 1 of the study clearly shows that the gender, age and professional status of a subject affects not only the experience of stress but the

responses to those stresses and those differences create cost implications particular between the genders as a result of lost productivity. Hence this would seem to suggest that to maximise the cost effectiveness of a brief therapy counselling then these difference will have to be addressed. This is to suggest already that counsellors might need to work differently with different demographic groups and that 'one size fits all' may not be appropriate. It remains to be seen whether this is suggested by the results from the counselling service i.e. whether there are gender and age response/change differences as a result of the counselling process.

6. Results for Stage 2: Analysis of Pre-treatment questionnaire (stage 2)

Comparison with the baseline sample in stage 1.

6.1 Introduction

Stage 1 of this study focussed on producing baseline data against which to compare those subjects who came for brief therapy via the EAP service as provided for the Education and Social Services department of Norfolk County Council. This chapter will focus mainly on the resulting data collated from stage 2 of the study. Stage 2 of the study was where, subjects, coming for counselling, were given a similar questionnaire to that which was used in stage 1. This questionnaire was given to them ideally prior to the subjects meeting with their counsellor, but this was sometimes not possible if they were meeting with the counsellor before they received the questionnaire in the post. In this case they were asked to fill out the questionnaire before the session or immediately after the first session. This questionnaire was called the 'Client assessment' questionnaire, but for clarity in the analysis of the data this was called the 'pre-treatment' questionnaire. Stage 3 of the study was where the subjects were either given the 'post-treatment' questionnaire by their therapist/counsellor immediately after their last session, or if the therapist forgot or if they did not attend for their last session, they were sent the post-treatment questionnaire by the administration at the EAP providers head-office as soon as the closing papers were sent in by the counsellor. This questionnaire was then to be sent onto the University in a s.a.e. provided. Stage 4 of the study was carried out 6 months after the closure of the case when a follow-up questionnaire was sent out to all subjects, irrespective of whether they had returned the post-treatment form or not.

The focus of this chapter was to examine the data from the pre-treatment questionnaire and to compare the responses with those of the baseline sample, with particular reference to how representative the counselling sample was, as compared with the baseline sample who responded in stage 1. The main interest here was to look at the gender, age groups and professional status of the sample and to see how representative the counselling sample was as compared with the baseline stage 1 sample. Further, the data presented here will only be that which this study has decided to focus on either to compare with the data presented in chapter 5 or that which will be used for comparisons with the stages 3 and 4 questionnaires.

The results presented here will firstly note the number of responses from all the three stages of the study i.e. stages 2-4 so the level of attrition can be noted i.e. the reduced

response rate as the study progress through the three stages. Then the results will focus on the demographics of those who responded at the pre-treatment stage (stage 2) comparing that sample with those groups in the baseline sample (stage 1). The focus will be on gender, age groups and professional status of the sample. Then the data concerning the numbers of days sick leave reported by the sample, will be presented followed by; the levels of presenteeism; the relative alcohol consumption and finally then the relative cost of stress as produced by this sample as compared with the baseline sample. All the latter data will be examined comparing the different demographic groups as one of the key issues for focus for this study are the response differences between groups. More demographic and other data was produced by the questionnaire but they were not analysed here as the information was not essential to the decided focus of this study.

6.2 Returned questionnaire

Below is listed the numbers of subject who responded at each of the stages 2-4 of the study and the numbers and proportions who completed forms at more than one stage of the study. The data in the table was then summed to produce the figures, for example, for the overall number of different subjects who participated at least in some part of the study

Table 6.2: Number of returned questionnaires

Questionnaires	Frequency	Valid Percent
Pre/Post/ Follow-up	33	10.8
Pre/Post only	107	35.1
Pre/Follow-up only	23	7.5
Pre – Only	78	25.6
Post – Only	33	10.8
Follow-up Only	28	9.2
Post/Follow-up only	3	1.0
Total	305	100.0

From the above table 6.2 can be seen that 241 (79%) of total responding counselling clients sent in pre-counselling questionnaires, 58% filled out a post-treatment questionnaire and 29% filled out the follow-up questionnaire. Of those who filled out the pre-treatment

questionnaire 10.8% completed both the post-counselling and follow-up questionnaires; 35.1% completed only the pre/post-counselling questionnaires and 7.5% completed the pre and follow-up questionnaires. 25.6% completed only the pre-counselling questionnaire. It is difficult to know why the drop out occurred. The failure to return any post-treatment or follow-up questionnaires could be due to the subjects not receiving them or the client choosing not to fill them out. There will be some examination of the data in later chapters to see if there were any differences in the populations of the responders and non-responders of these last questionnaires. Those who only filled out the post or the follow-up may be due to some counsellors not being sufficiently involved to have remembered to give the questionnaire prior to treatment. (71% of all counselling subjects were seen by 35% of the counsellors {8 out of 23} and these had seen 5-19.9% of the subjects {see appendix C: frequency of responses from each counsellor}).

Over the period of the research a total of 368 clients were seen (representing 2.94% of the total work force who were eligible to use the counselling service (i.e. Education and Social Services Departments). 305 different clients responded at some point to the research representing 82.9% response rate. The reason 63 did not fill a questionnaire may be because they were never given one by the counsellor or the call centre, or they refused to participate.

6.3 Demographic data comparisons with the baseline sample group

6.3.1 Gender frequencies

The data presented below will show the gender differences and this data will be compared with that from the baseline study (stage 1) in order to assess how representative those coming for counselling were of the general population from which they came. The data on gender, age grouping and professional status will be presented below. The data on part-timers will not be presented because, as was suggested in chapter 5, they were such a low stressed group as compare with their full-time colleagues that it was thought that this group will not be well represented amongst the counselling group. This was the case for nearly a quarter of the baseline sample was part-time and only 12.5% came for counselling as opposed to the 24.3% within the organisation as a whole as represented by the response rate the baseline sample in stage 1 (and it was believed that this figure of 24.3% was possibly an under-representation of this group especially amongst the non-professional females, see chapter 5).

Table 6.3.1 Proportion of counselling responders x gender

Gender	Baseline frequency	Baseline percent	Counselling frequency	Counselling percent
Male	829	36.2	72	27.0
Female	1461	63.8	195	73.0
Total	2290	100.0	267	100.0

Where the gender was known for the sample that came for counselling during the research period, 73.0% were female and 27.0% were males. Compared with the proportion of each gender in the ‘Well-being’ baseline study, this would seem to be fairly representative, though the males were slightly under represented and there was an increase of 16% in the females who came for counselling as compare to those who responded to the baseline stage 1 questionnaire.

6.3.2 Age group frequencies

Although the ages of the subjects were originally collated into seven age groups it was found in the stage 1 analysis that the responses of the subjects differed more when the age groups were divided into two age groupings. This also facilitated the analyses of those differences. Thus the subjects for the counselling group were also grouped into the age groups of 16-35 and 36-64+ for the comparative analyses.

Table 6.3.2 Age grouping of sample

Gender	Age groupings		Total
	16-35	36-64+	
Male	<i>11 - 15%</i> (29%)	<i>61- 85%</i> (71%)	72
	22% (42%)	29% (34%)	27% (36%)
Female	<i>40 – 21%</i> (23%)	<i>150 – 79%</i> (77%)	190
	78% (58%)	71% (66%)	73% (64%)
Total	<i>51- 19%</i> (25%)	<i>211 – 81%</i> (75%)	262

(NB. In the table above, the numbers in italics are the actual numbers of respondents in each group. The numbers in bold are the percentages of each group as a proportion of each category. The numbers in the brackets are the equivalent percentages for that group that were found in the baseline measure in stage 1).

From the above table 6.3.2 it can be seen that for the females, the proportion from each age group matches the proportions of females in each of those age groups in the baseline sample. However, in those coming for counselling the younger males were well unrepresented as compared with their proportion in the 'Well-being' study in stage 1 when the males in both age groups were compared. This was also the case when the proportions of males to females in the younger age group were compared. That is the younger males were well under represented, whereas in the older age group the proportion of males to female fairly match the proportions within the baseline stage 1 sample. So it would seem that the males aged 16-35 were the group who were the least likely to use the counselling service.

Data was also obtained from the call centre with respect ages of clients who were referred to the therapist irrespective of whether they opted to participate in the study. Unfortunately the ages of the clients was only recorded for 35% (128) of those referred for counselling by the call centre. Of these, 85.9% were in the 36-64+ age group. Thus the proportions of those who answered a questionnaire, within each age groups were fairly similarly to the proportion of the overall number who were offered counselling. This also suggests that the older age group were more likely to seek out counselling help (for more detailed gender/age results: see appendix A3: tables A3.1-2)

6.3.3 Professional status of sample

The subjects recorded their jobs on the questionnaire and then these were collated into the two categories of professional and non-professional employees.

Those who were categorised as professional were all subjects who were: 1.*Teachers*; 3.*Social Workers*; 4.*Managers*; 11.*Surveyors*; 12. *Highway Inspector*; 13.*Child Psychologists*; 14.*Occupational Therapists*; 18. *Legal Executives*; 19. *Town Planners*; 21.*Assistant Managers*; 22.*Head Teachers*; 28.*Librarians*; 31.*Civil Engineers*; 32. *Educational Advisors/Inspectors*; 33.*Deputy Heads*; 34. *Environmentalists*; 36. *Nurses*; 37.*Educational Welfare Officers*; 38.*Archaeologists*; 39. *Entomologists* (numbers refer to coding in data collection).

Those who were categorised as non-professional were all subjects who were not any of the above. (For full occupation frequency amongst counselling sample – see appendix C).

Table 6.3.3 Professional status of respondents x gender

Professional status		Professional	Non-professional	Total
Gender	Male	55 – 79% (41%) 29% (37%)	15 – 21% (59%) 22% (35%)	70 27% (36%)
	Female	137 – 72% (38%) 71% (63%)	52 – 28% (62%) 78% (65%)	189 73% (64%)
Total		192 – 74% (39%)	67 – 26% (61%)	259

(Figures in the brackets represent the proportions in the baseline study; Figures in bold represent the equivalent proportions in the counselling sample)

The proportions of professionals to non-professionals in the baseline ‘Well-being’ sample (in stage 1) in each of the genders and overall were fairly similar, and the proportion of males to females in each of the professional status groups were also fairly similar and nearly $\frac{2}{3}$ of the respondents were female in both of the professional status groups.

In the counselling (stage 2) sample the proportions of males to females in each professional status group were also similar, as was the proportion of each of the professional status groups within each gender, though as compared with the baseline sample the males were unrepresented especially within the non-professional groups. The biggest difference between both sample groups was that, in the baseline sample, the non-professionals made up the larger proportion of the work force but nearly $\frac{3}{4}$ of those who came for counselling were in the professional group, irrespective of gender, and the proportion of males in each of the professional groups were under-represented within the counselling sample when compared with the baseline sample.

6.4 Days off sick

Days off sick has been seen to be a reflection of the amount of stress being experienced by a work force. However, in the analysis of the stage 1 data on the baseline sample it was found that this was only the case for the females, that is, days off sick correlated with the various stress factors. Further, in the baseline sample the females took significantly more days of sick than the males, particularly the non-professional females. The questions to be addressed from the stage 2 data is whether those who came for counselling took significantly more days of sick than the baseline sample and what were the gender and professional status differences in this sample.

Table 6.4.1 Days off sick in the last year x gender

Gender	Mean	N
Male	(4.92) 12.12	64
Female	(6.71) 15.74	169
Total	(6.05) 6.75	233

(Figures in the brackets = Mean for baseline sample)

Table 6.4.2 Days off sick in the last year x gender – significance differences compared with baseline sample

How many days sick leave in the last year?			
	t	df	sig. (2-tailed)
	Test value = 6.05 baseline mean		
All subjects	4.267	232	.000
	Test value = 4.92 baseline mean - males		
Males	2.144	63	.036
	Test value = 6.71 baseline mean - females		
Females	3.602	168	.000

From table 6.4.1 it is seen that the mean number of days off sick for the counselling sample was 6.75 days as compared with 6.05 days for the baseline sample. This difference was very significant ($p < .001$) (see table 6.4.2). This suggests that those coming for counselling had significantly more days off sick. For the males coming to counselling, the mean number of days off sick was 12.12 compared with 4.92 for the baseline sample. This difference was significant ($p < .05$). The females coming for counselling had a mean of 15.74 days off sick compared with 6.71 days for the baseline sample. This difference was also very significant ($p < .001$).

However, contrary to the findings from the baseline sample where there was a significant difference between the levels of sickness for the males and females (females having significantly more days of sick with $p < .05$ {see chapter 5 and appendix B6: table B6.1.3}); for those coming for counselling there was no significant difference between the genders in their levels of sickness (see appendix A2: table A2.4). Thus it would seem that the counselling sample took significantly more days off sick than the baseline sample irrespective of gender and there was no difference between the genders in the stage 2 samples unlike the stage 1 sample.

Table 6.4.3.1 Days off sick in the last year: Professional status groups x gender - means

Professional	Mean	N
Male	9.98	49
Female	15.31	121
Total	13.78	170
Non-professional	Mean	N
Male	19.13	15
Female	16.81	48
Total	17.37	63

When the counselling subjects were divided into two professional status groups of ‘professional’ and ‘non-professional’ the mean number of days off sick in the last year for the ‘professional’ group was significantly higher than for the subjects in that group in the baseline norm for the ‘Well-being’ stage 1 study, ($p<.001$). This also applied to both genders. For the subjects in the ‘non-professional’ group the counselling subjects came with significantly higher levels of sickness than the baseline norm ($p <.05$). This applied also only to the females. There was no significant difference for the non-professional males between those coming for counselling and the baseline norm for the numbers of days sick for the last year. However, this group was not well represented in the counselling group (see above).

When the genders were controlled for professional status there was no significant difference between the genders for the counselling sample in the number of days taken off sick in the last year. Nor were there any significant differences between the two professional status groups when controlled for gender or age (see appendix A2: table A2.8 and 9).

Thus it would appear that neither the professional status nor age of the counselling sample were significant variables for the counselling sample with respect to the number of days of sick. The only issue that is clear from this data is that the counselling sample came having taken significantly more days off sick irrespective of gender, age and professional status than the equivalent groups in the baseline sample. However, it should be noted that in the

counselling sample there was an over representation of the older 36-64+ year old group and of those in the professional group (see above).

6.5 Presenteeism

The level of efficiency/effectiveness i.e. presenteeism was calculated from the responses to question 14 of the 'Client assessment' (pre-treatment) questionnaire where subject were required to scale how efficient or effective they felt they were at work on a scale of 0% to 100%. As the mean response was at about 80% on the baseline measure, this was used as the actual baseline. Hence only those who fell below that 80% were included in the calculations for costs for presenteeism. The key finding in stage 1 from the baseline sample was that the males score themselves as performing/functioning at significantly lower levels of efficiency than the females.

Table 6.5.1 Estimated level of efficiency/effectiveness (presenteeism)

Gender	Mean	N
Male	54.00%	60
Female	61.34%	160
Total	59.34%	220

Table 6.5.2 Estimated level of efficiency/effectiveness – presenteeism – stage 2 sample compared with stage 1 baseline sample

Presenteeism	t	df	sig. (2-tailed)
Test Value = 78.05 baseline mean – all subjects			
Pre: presenteeism All	-11.958	219	.000
Test Value = 75.92 baseline mean - males			
Pre: presenteeism Males	-7.403	59	.000
Test Value = 79.27 baseline mean - females			
Pre: presenteeism Females	-9.834	159	.000

Table 6.5.3 Presenteeism for counselling sample – males v females

Presenteeism	T	Df	Sig. (2-tailed)
Male v Females	-2.107	218	.036

It can be seen from the table 6.5.2, that the levels of efficiency/effectiveness (presenteeism) for the counselling sample as a whole and for each of the genders separately was significantly lower than the baseline means ($p < .001$ for all). But like the baseline sample the males in the stage 2 (counselling) sample scored themselves as functioning at significantly lower levels of efficiency than the females coming for counselling.

6.6 Alcohol consumption

In chapter 5 it was noted that alcohol consumption correlated with the use of the passive coping response and the group that was significantly more likely to use this response was the younger age group (16-35) of males. But weekly alcohol intake for the females correlated with the use of coping strategies of ‘Social support’; ‘Depressive and Emotive’ responses. So it was seen as important to record the data on alcohol consumption in order to examine the relationships between this and coping responses and change for the counselling sample in chapter 9.

Table 6.6.1 Weekly alcohol intake of the counselling sample in stage 2

Gender	Mean	N
Male	17.33	64
Female	7.47	173
Total	10.50	238

Table 6.6.2 Weekly alcohol intake of counselling subjects: comparisons with baseline sample

Weekly alcohol intake	t	df	sig. (2-tailed)
Test Value = 7.53 baseline mean – all subjects			
All Subjects	2.796	237	.006
Test Value = 11.83 baseline mean – males			
Males	1.956	63	.055
Test Value = 5.08 baseline mean – females			
Females	2.944	172	.004

From table 6.6.2 it can be seen that the weekly alcohol intake of the counselling subjects as a whole was significantly higher than that of the baseline sample ($p < .01$) and this also applied to the females counselling subjects too ($p < .01$) but not the males counseling subjects. This may have been because the group that used alcohol the most in the baseline sample were the younger males and this group was not well represented in the counselling sample in stage 2 (see also appendix A2: tables A2.19-21).

6.7 Cost of stress for the counselling sample

The sickness costs were calculated in chapter 5 by taking the number of available working days per year (260). This figure was then divided into the annual salary to give the daily salary. The sickness cost was then calculated by multiplying the daily salary by the number of days sick.

The cost of presenteeism was calculated first by recognising that the mean response for the estimated efficiency level was about 80%. This was taken then as the base measure, so any scores above that were excluded and the rest were calculated as fractions of 80 and this fraction was taken away from 1, this would represent the fraction lost in work efficiency (A). The number of days at work for this calculation was calculated as the total number of days at work (260) minus the average number of days leave (30); then the number of days sick were deducted (B). This figure was then multiplied by the fraction lost in efficiency (AxB). This sum was then multiplied by the daily salary. Thus a figure was arrived at that represented an estimate, from the employee's point of view, of what stress at work costs him/her in efficiency or what the lowered productivity is costing the organisation (the County Council). The total stress costs were calculated by summing 42.6% of the costs of

sickness (as per Kearns, 1986 and Cooper and Davidson, 1982 – see below) with the costs of presenteeism.

(Kearns, {1986} suggested that up to 60% of all work absence is caused by stress-related disorders and of that 71% of the stress is seen as work related {Cooper and Davidson, 1982} thus equalling 42.6%).

In chapter 5 the total cost of stress to the organisation was considerable (estimated to be around £35.2 million for the organisation as a whole in 1996 or £47.1 adjusted for inflation to 2008).

It was seen as important to analyse costs of stress in the stage 2 subjects in the same way as this will allow for a comparison in relationship stress costs between the baseline sample group and those who have come for counselling. Further, if the base cost of stress for the counselling sample is calculated and the levels of stress are reduced as a result of the counselling, then the cost of stress in that employee will be reduced thus saving the organisation in loss of productivity. Gaining figures here will also allow for calculations with respect to whether buying a counselling service is cost effective. It will only be cost effective if the nominal saving is greater than the cost of the service (estimated £33 per head per year for 10% of the work force {Masi, 1984}, but this figure is not likely to be accurate as the calculated costs of EAPs varies a great deal and is commercial sensitive so the EAP organisations would not communicate how the service costs are calculated and hence what they are per head).

Below, the costs of stress are presented separating the genders again, as in chapter 5 it was clear that the costs of stress from the each gender differed significantly.

Table 6.7.1 Mean costs in pounds for sickness, presenteeism and total stress costs x gender – for stage 2 sample

Gender		How many days sick leave last year?	Sickness costs	Presenteeism costs	Total stress costs
Male	Mean	12.12	£687.00	£7444.36	£7737.02
	N	64	60	47	60
Female	Mean	15.74	£955.69	£5602.84	£6009.96
	N	169	164	108	164
Total	Mean	6.75	£883.72	£6161.24	£6537.70
	N	233	224	155	224

Table 6.7.2 Mean costs in pounds for sickness, presenteeism and total stress costs x gender for stage 2 sample -tests for significant differences

Male v Females	t	df	sig. (2-tailed)
How many days sick leave last year?	-.791	231	.430
Total sick costs	-.801	222	.424
Presenteeism costs	1.921	153	.057
Total stress costs	2.061	222	.040

In chapter 5 it was seen that the females took significantly more days off sick than the males, but the males experience significantly lower levels of presenteeism that the females. Thus in the baseline sample while the cost of sickness in the females was higher than the males, the difference was not significant as the group of female who took the most time off were the non-professional female who earned less. So their sickness cost the organisation less in relative terms than the males. However in the baseline sample the males were costing the organisation significantly more than the females in lost productivity as a result their low presenteeism.

However, amongst the counselling sample in the stage 2 part of the study, it can be seen in table 6.7.2 above that there was no significant difference between the genders for days off sick, total cost of sickness, and presenteeism, but still the males were costing the organisation significantly more in total stress costs than the females who came for

counselling. The reason for this difference in gender stress costs between the baseline and the counselling samples was probably due to the fact that the counselling sample had an over representation proportion of the professional group and of the older age group of 36-64+ and nearly 75% of the responders were female and this was 16% increase over the proportion of females who responded to the baseline stage 1 questionnaire. This is to say that in the baseline study the males were more stressed and costing the organisation more in lost productivity than the females but in the stage 2 counselling group the males were somewhat under represented. Also in the baseline the non-professionals made up 60% of the sample and it was this group who took the most time off sick. The stage 2 counselling sample was different in relative proportions of the professional groups as nearly 75% of this sample was from the professional group who in the baseline stage 1 study experienced significantly more stress arising from presenteeism. For the baseline sample it was the professionals who experienced significantly more problems with respect to presenteeism as compared with the non-professionals and the differences between the genders within the professional group was significant but the significance was not as marked as between the professional groups. Hence in the stage 2 sample it is again seen that while there is a significant difference within the professionals between the genders this is only apparent for the total stress costs (appendix B11; tables B12.17-21 for more details).

Table 6.7.3 Mean costs in pounds for days off sick in the last year - stage 2 sample compared with baseline stage 1 sample

Total sick cost	t	df	sig. (2-tailed)
Test value = 327.34 mean baseline cost – all subjects			
All subjects	3.749	223	.000
Test value = 309.28 mean baseline cost - males			
Males	2.137	59	.037
Test value = 338.2 mean baseline cost - females			
Females	3.215	163	.002

From table 6.7.3 it can be seen that the total sick costs of those coming for counselling was significantly higher than the baseline sample for the samples as a whole and for the genders individually. If 60% of all sickness costs are due to stress and 71% of that cost is due to work stress then the cost due to work stress will be 42.6% of the total cost of sickness (see above). For the total counselling sample this would work out at £376.46p per year, compared with the £140 work-stress sickness costs found for the whole baseline

sample. For the males the work-stress sickness costs equal £292.66p and the females cost £407.12p. This would suggest that if the counselling can reduce this by more than the estimated annual cost per head for counselling (previously estimated at £33 per head – see Chapter 2), then the service can be said to be cost effective. (It is well to remember this was at 1996 cost calculations – when the study was carried out; but if this was to be converted then the inflation rate from July, 1996 to December, 2008 can be taken as being 33.90% {InflationData.com}, so all figures would need to be multiplied by this rate). Therefore at 2008 rates the total cost of stress for the counselling sample would be £504; for the males it would be £392 and for the females it would be the equivalent of £545 as compared with £187 per head per year for the baseline sample group from stage 1.

Table 6.7.4 Mean costs in pounds for presenteeism - comparisons with baseline sample

Presenteeism costs	t	df	sig. (2-tailed)
Test value = 1884.67 baseline mean – all subjects			
All Subjects	9.621	154	.000
Test value = 2390.45 baseline mean – males			
Males	5.990	46	.000
Test value = 1540.3 baseline mean – females			
Females	7.887	107	.000

From table 6.7.4 it can be seen that the costs relating to presenteeism, when compared with the baseline sample, were significantly higher, for the whole counselling sample and for the males and females separately (all $p < .001$).

6.8 Summary

Compared with the proportion of each gender in stage 1 the baseline sample, those coming for counselling in stage 2 would seem to be fairly representative of the organisation as a whole, particularly with respect to the majority profession/older age group (36-64+). The professional group was well over-represented as compared with the stage 1 baseline respondents. With respect to age among the females a similar proportion of each age group came to counselling as compared with the baseline but amongst the males, the young males were well under represented within the counselling group.

Overall those coming for counselling seem to have significantly more days off sick than the baseline mean. This applied to both the females and the males. The findings from the

baseline sample were that there was a significant difference between the levels of sickness for the males and females (females having significantly more days off sick, though this was really only true of the non-professional females). For those coming for counselling there was no significant difference between the genders in their days off for sickness, nor was there when the genders were controlled for age. When the professional groups were examined, those in the professional group took significantly more days off sick than the baseline sample, this applied to both genders. But amongst the non-professionals this applied only to the females. But for this last group the males were under represented. For the stage 2 counselling subjects, when the genders were compared, there was no significant difference in days taken off sick, particularly as the majority of the responders were in the older age group and were in the professional group of workers.

On looking at levels of work efficiency i.e. presenteeism, for the whole counselling sample and for each of the genders, irrespective of the sub-groups they were in, this was significantly lower than the baseline means within each of the sub-groups, this perhaps might be a reflection of the higher stress levels of the counselling sample as compared with the baseline sample as there was a higher proportion of those in the professional group of staff within the stage 2 counselling sample than found in the baseline sample.

It was also seen that the weekly alcohol intake of the counselling subjects as a whole was significantly higher than that of the baseline sample and this applied mainly to the females counselling subjects, but not the males counselling subjects. This may have been because the group that used alcohol the most in the baseline sample were the younger males and this group was not well represented in the counselling sample in stage 2.

For the total counselling sample the mean cost of work-stress sickness was found to be higher (£504 per subject per year) than that found in the baseline sample (£187 per year). For the males the work-stress sickness costs, equalled £392 and for the females £545 (all figures here are quoted at the 2008 equivalent rate). The differences were all significant when compared with the baseline mean. This would suggest that if the counselling could reduce this cost by more than the estimated annual cost per head for counselling then the service could be seen as cost effective.

7. Results from stages 2-4: Analysis of the counselling data - Work stress

7.1 Introduction

The previous chapters 5 and 6 analysed the group data from the stages 1 and 2 of the study focussing on the groups of subjects that were of interest in this study and the difference between the proportions of each of the groups with respect to stage 1 (baseline well-being study) and stage 2 (client assessment/pre-treatment stage). This chapter will focus on the differences in responses and the changes that these groups made through the treatment of the brief therapy within the EAP service as offered to the organisation (Norfolk County Council) by the EAP provider by their counselling affiliates. The focus of this chapter will be the changes through stages 2 (pre-treatment); 3 (post-treatment) and 4 (six month follow-up) for the variable called 'work stress'. The results were derived from the subjects scores through the three stages 2-4 for the six stress factors obtained from creating a reduced OSI scale (Occupational Stress Indicator); Factors intrinsic in the job; Managerial role; Relationships with others (at work); Career and achievement; Organisational structure and change and Home/work interface. Finally the response will also be shown for the total work stress experienced which will be represented by the mean of the sum of the means for the six stress factors. Included in this last section will be the estimated cost of the stress of those coming to counselling and related savings the results would seem to indicate.

The groups that were of interest to be shown were the results for the subjects as a whole group, the genders differences including how these might interact with the age groups of 16-35 and 36-64+ and the professional groupings (i.e. professional or non-professional) where possible. The younger age group and the non-professional group were not examined for gender differences as the males in each of these groups were under represented. The interest was to examine whether there were differences between these groups in their response to the brief therapy. It should be noted here as the treatment was brief the mean number of sessions that the subjects received was 5.08 (males = 5.43 and females = 4.96).

This chapter will be set out firstly with a table presenting all the mean results for each of the work stress factors for the group as a whole and for each gender separately at each stage of the study. The higher the figure in the mean column the greater the experience of stress as experienced by that group of subjects. As the scores run down the column under 'mean' it is possible to see how the means dropped or not through the stages 2-4. Stage 1 'mean' was the mean for baseline sample group.

Following this summary table, the results for each of the factors will be explored separately, first looking at the group as a whole and then by looking at the gender differences and how these may interact with age and professional status.

The key issue for this study was whether the therapy produced change in the subjects, that is, whether the brief therapy within the EAP service was effective. This study is mainly interested in group differences, so most of the calculations were from the means for each group as a whole. Firstly, a table will be presented which will show where, for the groups as a whole, there has been a shift of means towards firstly, the baseline norm at both stages 3 and 4 (to within one standard deviation of the stage 1 mean) and whether there was a significant reduction in stress (at least one standard deviation) from the stage 2 level. Finally the table shows whether there has been any significant change between the post-treatment stage 3 and the follow-up stage (stage 4). This was seen as important in order to measure whether there was a change during the six months before follow-up. In some cases there may have been continued improvement and this would show that the stage 4 mean was significantly lower than the stage 3 mean and remained significantly different from the stage 2 mean and was not significantly different from stage 1 mean. If there had been, for example, a deterioration between stages 3 and 4 (i.e. between post-treatment and follow-up) then this would be seen showing a significant difference between stages 3 and 4, but not between stages 2 and 4 and stages 1 and 4 would again show significant differences, that is the group mean had move out of the normal baseline range (one standard deviation) and back into being part of the dysfunctional population, possibly moving back to their pre-treatment mean level.

Further, effect sizes have been widely used in psychotherapy outcome research as an index of magnitude of effect. The method utilised to calculate effect size was based on a comparison of pre- and post- counselling treatment means. The effect size estimate was based on pre- and post-treatment means, $Es = m_2 - m_1 / sd$ (for baseline norm) where m_1 = pre-treatment mean, m_2 = post-treatment means. This was further extended to look at the Es at the follow-up stage also. In this case m_2 = follow-up mean. The effect size also allows for an examination of the proportion of subjects who had improved.

Also, as discussed in chapter 4: Method - section 4.13, a frequently adopted criterion for measuring change in psychotherapy studies is the use of clinically significant change. The above indicated results dealt with looking at the means for each group of subjects as a whole. But it is also instructive to look at the change process on an individual level. It will

be recalled that it was seen that the first issue that needed to be assessed on the individual level was whether or not the client's post-therapy mean represents a clinically significant outcome in terms of whether or not it fell within the functional population range (i.e., above the cut off mean delineating functional and dysfunctional populations). The definition adopted for this study was that the client's post-treatment mean represents a return to normal functioning i.e., moved inside the range of the normal population (in this case inside the range of the baseline mean, i.e. less than one standard deviation), that is, the clients entered therapy as part of a dysfunctional population and by the end of therapy they were no-longer part of that population or were part of the normative population. To test for this the scores at the various stages of the study (stage 2-4) were compared with those of the baseline means from stage 1. If the difference between the means was no longer significantly different (to within one standard deviation) where it had been at the start of the counselling, then the subjects mean can be said to have move to where they were part of the normative population. If this was the case then clinically significant change is said to have occurred. If the means for a subject at stages 3 and 4 was significantly lower than that at stage 2 then the therapy can be said to have produced significant change even though the resulting change may not bring the subject's mean to lie within the normal baseline range, that is, there could be significant change without producing clinically significant change. If this is the case then there can said to have been 'reliable change'. The goal for the therapy would be, ideally, to promote clinically significant and reliable change.

Thus the third table presented for each factor shows the number and percentages of those subjects individually who produced clinically significant and reliable change, those who produced only clinically significant change, those who produced only reliable change, those who produced no change at all and finally the number/percentage of those who experienced deterioration for these factors. Clinically significant change was produced when the subject moved to a level of stress that was within one standard deviation of the baseline normative mean using the standard deviation as produced by the baseline stage 1 study. The clinically significant change was calculated for both stage 3 and 4 of the study. The reliable change was calculated as being when the subject's stress mean for that factor was reduced by more than one standard deviation for that factor as produced again by the baseline normative mean calculations. The reliable change was calculated also for both stages 3 and 4 of the study. Those who showed no change may have produced change at stages 3 and 4 but that change was less than one standard deviation from the mean at stage 2. Those who deteriorated were those whose means rose to more than one standard

deviation above the mean at stage 2. This was for those subjects whose scores at the pre-treatment stage (stage 2) were outside the norm by at least one standard deviation.

So for this study the critical issues that will be address are; whether there were group differences in the effectiveness of the therapy to produce change and on the individual subjects' level, if change is produced, as a result of the therapy, then whether the change was clinically significant and reliable. The first table for each section dealing with each factor will present the data which will indicate whether there has been significant change at the various stages for the group being examined as a whole. Then the magnitude of the change will be indicated in the second the table showing the mean effect sizes with the percentage who improved and the third table will show the proportions of individual subjects that produced clinically significant and/or reliable change. (For tables showing these three forms of measure mentioned above with all the factors together, see appendix A18).

All the above issues discussed in this introduction will apply to chapters 8 and 9 as well when exploring the variable examined in those chapters.

7.2 Work stress

Below, in table 7.2 is presented the means for each work stress factor at each of the stages of the study for all the subjects together and for each of the genders separately. Stage 1 mean is the baseline mean; stages 2-4 shows the change of means between each of the stages from pre-treatment to post-treatment and then to the follow-up stage. A high mean indicates high stress, if the means becomes less; this indicates a lowering of the levels of stress for that factor for that group through the counselling. If the mean rises, as it seems to do at stage 4 (the follow-up stage) for some factors and particularly for the males, would indicate a deterioration, often after a period of improvement at stage 3 (post-treatment).

It may be also important as a brief reminder, to present again the meaning of the factors used here (for a full description see chapter 4: section 4.4).

Factors intrinsic to the job involved stress caused by, for example, poor physical working conditions and the effects of changes in shift work. It also includes issues around work overload either quantitative (i.e. having too much to do) or qualitative (i.e. being too difficult) and working long hours.

Item example for this factor: *I have had far too much work to do.*

Managerial role, i.e. a person's role at work was seen as another main source of occupational stress, involving role ambiguity (i.e. conflicting job demands), responsibility for people and conflicts stemming from lack of clarity of organisational boundaries.

Item example for this factor: *I have experienced conflicting job tasks.*

Relationships with others at work, if poor, creates stress. This includes the nature of the relationships and social support from work colleagues and from home, managers and subordinates and whether they experience harassment or bullying at work from colleagues or management.

Item example for this factor: *I have experienced a lack of social support.*

Career and achievement problems is another major source of stress arising from such things as the impact of over promotion, under promotion, lack of job security, fear of redundancy and thwarted ambition.

Item example for this factor: *I have felt undervalued.*

Organisational structures and climate includes such factors as office politics, lack of effective consultation, lack of participation in the decision-making process and restrictions on behaviour.

Item example for this factor: *I have experienced a lack of consultation and communication.*

Home/work interface includes any pressure happening at work that affects home such as fear of job loss, blocked ambition, work overload, etc.

Item example for this factor: *I have been taking work home*

Total stress presented is the sum of the means for all the work stress factors together.

(Detailed analyses of all factors can be found in appendix A. PPF – further analyses: A4-10)

Table 7.2 Work stress

Subjects		All			Males			Females		
Stress factor	Stage	Mean	N	sd	Mean	N	sd	Mean	N	Sd
Factors intrinsic to the job	1	2.04	2284	.86	2.14	826	.82	1.98	1458	.87
	2	2.60	235	.99	2.72	62	.87	2.56	173	1.03
	3	2.36	161	.99	2.27	34	.89	2.38	110	1.01
	4	2.21	82	1.00	2.62	15	1.14	2.22	47	.94
Managerial Role	1	1.75	2279	.78	1.86	826	.76	1.68	1453	.78
	2	2.18	235	.91	2.29	62	.90	2.14	173	.92
	3	2.02	150	.89	2.05	34	.91	2.01	110	.91
	4	2.06	65	.93	2.48	15	1.16	1.92	44	.87
Relationship with others	1	1.53	2279	.73	1.62	825	.76	1.48	1454	.71
	2	1.99	235	1.13	2.09	62	1.1	1.95	173	1.13
	3	1.87	161	1.03	1.74	34	.85	1.86	110	1.06
	4	1.92	76	.98	2.30	15	1.25	1.80	44	.92
Career and Achievement	1	2.27	2276	1.2	2.44	825	1.21	2.18	1451	1.19
	2	2.85	235	1.29	3.14	62	1.22	2.75	173	1.31
	3	2.64	161	1.32	2.78	34	1.33	2.63	110	1.32
	4	2.41	76	1.27	2.83	15	1.41	2.25	44	1.22
Organisation structure and climate	1	2.19	2282	.97	2.33	826	.95	2.10	1456	.97
	2	2.78	235	1.12	2.92	62	1.10	2.73	173	1.12
	3	2.57	161	1.12	2.73	34	1.16	2.54	110	1.12
	4	2.40	76	1.11	2.77	15	1.26	2.28	44	1.02
Home/work interface	1	1.72	2284	.71	1.72	827	.68	1.72	1457	.73
	2	2.44	236	.80	2.44	62	.72	2.44	174	.83
	3	2.23	161	.83	2.14	34	.78	2.27	110	.86
	4	2.09	78	.93	2.29	15	1.00	2.09	44	.86
Total work stress	1	1.91	2285	.68	2.02	827	.65	1.85	1458	.69
	2	2.46	236	.79	2.60	62	.73	2.42	174	.80
	3	2.28	161	.81	2.29	34	.81	2.28	110	.82
	4	2.06	82	.96	2.55	15	1.05	1.98	47	.90

7.3 Stress factor - Factors intrinsic to the job

Table 7.3.1 Showing where there was significant change between stages for the various groups examined. (✓ = $p < .001$; * = $p < .01$; + = $p < .05$; - = no significant difference) (stage 1 = baseline measure; stage 2 = pre-treatment; stage 3 = post-treatment and stage 4 = follow-up).

Stress factor	Comp. with	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Factors intrinsic to the job	Stage 1	2	✓	✓	✓	✓	✓	✓	✓	✓	+	✓	✓
		3	✓	-	✓	-	✓	-	✓	-	-	-	-
		4	-	-	-	-	-	-	-	-	-	-	-
	Stage 2	3	*	*	-	-	*	*	-	=*	-	+	+
		4	=*	-	+	-	*	-	*	-	-	-	+
	Stage 3	4	-	-	-	-	-	-	+	-	-	-	-

Table 7.3.2 Effect sizes for change between pre- and post-treatment (stages 2 and 3) (PP Es = Pre/Post Effect size) and between pre-treatment and follow-up (stages 2 and 4) (PF Es = Pre/Follow-up Effect size) – all groups of interest. (%Imp. = percentage of subjects improving; N.Prof. = Non-professional)

Stress factor	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Factors intrinsic to the job	PP Es	.36	.69	.26	.43	.34	.75	.20	.44	.12	.95	.38
	%Imp.	46.4	67.9	49.5	60.9	52.0	69.2	46.1	57.1	44.1	70.0	53.5
	N	125	28	97	23	102	26	76	91	34	18	69
	PF Es	.44	.12	.54	-.04	.50	.13	.65	.38	.59	.00	.50
	%Imp.	46.0	25.0	52.6	28.6	48.8	27.3	56.2	41.5	66.7	20.0	48.4
	N	50	12	38	7	43	11	32	41	9	8	29

Table 7.3.3 Percentage changed (clinically significant and reliable change) for work stress factor - Factors intrinsic to the job.

(CS and RC = number and percentage of those who produced clinically significant change who also produced reliable change for all those subjects who were within the dysfunctional group at pre-treatment; C.S. = Clinically significant change only (not including those within the CS and RC group) – number and percentage of the group whose means were no longer significantly different from the baseline norm at end of therapy stage who started as part of the dysfunctional population; Reliable change – number and percentage of treatment group whose means dropped significantly after treatment from the whole group of subjects and who started as part of the dysfunctional population; No change = no reliable change – number and percentage of treatment group who did not change from the whole group of subjects (all together, or males or females – and who started as part of the dysfunctional population; Deteriorated – number and percentage of treatment group who became worse, from the whole group of subject and who started as part of the dysfunctional population.)

Change		CS and RC		C.S. only		RC only		No change		Deteriorated		
Stress factor		Group	No	%	No	%	No	%	No	%	No	%
Factors intrinsic to the job	Post-treatment	All	21	35.6	5	8.5	8	13.6	22	37.3	3	5.1
		Male	8	57.1	0	0	3	21.4	3	21.4	0	0
		Female	13	28.9	5	11.1	5	11.1	19	42.2	3	6.7
	Follow-up	All	8	36.4	2	9.1	3	13.6	8	36.4	1	4.5
		Male	1	20.0	0	0	1	20.0	3	60.0	0	0
		Female	7	38.9	2	11.1	3	16.7	5	27.8	1	5.6

(percentage in bold)

Post- treatment results:

N.B: for all subjects (185 -42 males and 143 females) who had pre-treatment scores for this factor; 129 (67.7% of total {66.7% of the males and 70.6% of the females} came to the counselling with levels of stress for this factor that were not significantly different from the baseline norm.

Follow-up results:

N.B: for all subjects who had pre-treatment scores for this stress factor 27 (56.3% of total at the follow-up stage – 60.0% of the males and 55.3% of the females) came to the counselling with levels of stress for this factor that were not significantly different from the baseline norm.

7.3.1 Factors intrinsic to the job – all subjects

From table 7.2 it can be seen that the stress levels for ‘Factors intrinsic to the job’ dropped through all the stages 2-4 of the study for all the subjects together. From table 7.3.1 it can be seen that the initial mean total stress created by ‘Factors intrinsic to the job’ for all the subjects coming for counselling was significantly higher than that obtained from the normative baseline mean. This dropped immediately after therapy, though this was still

significantly different from the baseline mean. The means for the post-treatment and follow-up were significantly different from the pre-treatment mean. The difference between post-treatment and follow-up was not significant. But the mean at follow-up dropped to a level that was not significantly different from the baseline mean suggesting the subjects as a whole returned to the level of stress of the baseline sample for this factor.

Table 7.3.2 shows for all the subjects together the mean effect sizes for measuring the strength of the change between the pre- and post means and pre- and follow-up means for all subjects and the percentage who have improved. From this can be seen that for 46.4% of all subjects there was a positive effect size by stage 3. The mean effect size changed marginally at follow-up from .36 to .44 and the percentage improving dropped slightly to 46%.

Thus for all the subjects there was a consistent improvement in stress levels attributed to 'Factors intrinsic to the job' between pre- and post-treatment, and this was maintained or even produced further significant change at follow-up. Also where follow-up was examined the levels of stress for 'Factors intrinsic to the job' were reduced to further to levels which were not significantly different from the baseline mean.

For the age groupings, the 16-35 year olds seem to benefit from the counselling in that at stage 3 their mean was no longer significantly different than the baseline norm and it stayed that way at stage 4. But while there was significant change between stages 2 and 3 there was no significant difference between stages 2 (pre-treatment) and stage 4 (follow-up) suggesting the group mean had fallen to pre-treatment stage. From table A18.2 (see appendix A) can be seen that 60.9% of this age group of subjects improved. But their levels of stress at pre-treatment were not as high as that for the 36-64+ year olds (see appendix C: C7.1).

The 36-64+ year olds produced significant change as a result of the counselling and were able to improve on that change by the follow-up stage, but not significantly. But as the starting stress levels were very much higher than the baseline mean, then the levels at post-treatment and follow-up were not reduced to the point where they were no longer significantly different from the baseline mean, though the change was significant (see table 7.3.1) and the effect size was just above average by the follow-up stage (.51) (table 7.3.2).

The professionals seem to move their stress levels towards the norm after treatment and to produce significant change. But for the non-professionals, the effect size after treatment was very low and there was no significant difference between pre- and post-treatment. But by follow-up, the effect size had improved and the stress level at follow-up was significantly lower than that at the pre-treatment stage. So while the professionals improved and this dropped slightly by follow-up, the non-professionals had improved further by the follow-up stage.

7.3.2 Factors Intrinsic to the job – gender

From table 7.2 it can be seen that the stress levels for ‘Factors intrinsic to the job’ for the males dropped through the stages 2-3 of the study but rose again at stage 4 in contrast to the females where the stress levels continued to fall through all the stages 2-4. The initial mean total stress created by this factor for the males and females coming for counselling was significantly higher than that obtained from the baseline mean obtained from the ‘Well-being’ study (see table 7.3.1). The stress score for this factor for the males dropped significantly immediately after therapy; but this rose again in the 6 month follow-up score though not to the pre-treatment level but it was not significantly different from the pre-treatment mean. The difference between the baseline mean and the post and follow-up treatment means for this factor for males was not significant. This is in contrast to the females where the means remained significantly different from the baseline mean at the post-treatment (stage 3) point of the study, but by the follow-up stage the females subjects had continued to improve and their level were then such the level was no longer significantly different from the baseline mean. Further, the levels at both stage 3 and 4 were significantly different from the mean at stage 2, hence indicating significant change for both stages. There was no significant difference between the means at stages 3 and 4.

Table 7.3.2 shows the effect sizes for the magnitude of the change between the pre- and post means and pre- and follow-up means for the genders and the proportion who improved. From this can be seen 67.9% of the males there was a positive effect size by stage 3. But by the follow-up stage this had dropped to only 25.0% showing improvement. The males also showed a higher than average mean effect size of .69 at post-treatment but this dropped considerably to a very low level at the follow-up stage. This is in contrast with the females where at stage 3 only 49.5% had improved and the effect size was low, but at stage 4 the proportion had improved to 52.6% and the Es (effect size) was slightly higher than average at .54. The improvement rate for all subjects who showed some

degree of change whether small or large, does not indicate whether the improvement was significant, thus the need for the 'reliable change' data below.

Table 7.3.3 gives the percentage of subjects who produced clinically significant and reliable change. The trends shown on an individual level replicated the findings at the group level in that a higher proportion of the males produced clinically significant and reliable change than the females at stage 3 of the study i.e. at the post treatment stage; but by the follow-up stage the proportion of males achieving this dropped from 57.1% to 20.0%, whereas for the females the proportion rose from 28.9% to 38.9%. Yet for the subjects as a whole the proportion at both stages 3 and 4 was fairly consistent thus illustrating the importance of examining at least the genders separately as together the data can become confounded. Further, unlike with most of the other work stress factors, no males deteriorated by stage 4 compared to the females where 5.6% deteriorated at this stage.

From table 7.3.1 concerning the sub-groups of males in age group 36-64+ and in the professional group, it is seen that these groups of males made the best progress as a result of the counselling by the post-treatment stage (stage 3). The males in both these groups came with stress significantly higher than the baseline and showed significant improvement at the post-treatment stage. For these two groups the means were not significantly different from the baseline mean at both stage 3 and 4. But while the mean at stage 3 was significantly different than that at stage 2, this was lost by stage 4 in that the pre-treatment and follow-up mean scores were no longer significantly different. This is in contrast with the females in the same age and professional groups. The 36-64+ females showed that there was still a significant difference between the means at stages 1 and 3 but not between stages 1 and 4. The female professionals achieved this by stage 3. Further the female professions produced significant change between stages 2 and 3, and the 36-64+ year old females achieved this by the follow-up stage (stage 4).

From table 7.3.2 it can be seen that both the sub-groups of males (36-64+ year olds and the professionals) produced good effect sizes for the magnitude of the change at .75 and .78 respectively with 69.2% and 70.0% of these male subjects improving by stage 3, but by stage 4 this proportion had dropped considerable as had the effect sizes. This is in contrast with the females of these two groups showed a low effect size at stage 3 but by stage 4 this had improved to .65 and .50 respectively with 56.2% and 48.4% improving. (For above significance details - see appendix A4 and C7.1).

7.3.4 Factors Intrinsic to the job – summary

Thus from tables 7.2 and 7.3.1, 2 and 3 all groups arrived with stress levels for the factor ‘Factors intrinsic to the job’ that were significantly higher than that of the baseline norm. Those who benefited most from the counselling immediately after treatment for the work stress factor of ‘Factors intrinsic to the job’ were the males (as a group and as individuals) and also the 36-64+ year olds as a group and the professional males, though by the follow-up stage the proportion of those males who experienced clinically significant and reliable change dropped considerably. But for the females the change at stage 3 was not significant except for the professional females, but it was by stage 4, for the females separately and in the two groups (36-64+ and professionals); and by stage 4, the follow-up stage, the effect size for these groups of females was above average. Further for the females who came to therapy with stress levels for this factor that lay within the dysfunctional group, the proportion producing clinically significant and reliable change rose between stages 3 and 4 whereas this dropped for the males.

7.4: Stress factor - Managerial role

Table 7.4.1 Showing where there was significant change between stages for the various groups examined. (✓ = $p < .001$; * = $p < .01$; + = $p < .05$; - = no significant difference) (stage 1 = baseline measure; stage 2 = pre-treatment; stage 3 = post-treatment and stage 4 = follow-up).

Stress Factor	Comp. with	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Managerial Role	Stage 1	2	✓	✓	+	-	✓	✓	✓	✓	+	+	✓
		3	✓	-	-	-	✓	-	✓	-	-	-	-
		4	*	-	-	-	*	-	-	+	-	+	-
	Stage 2	3	+	-	-	-	-	-	-	+	-	-	-
		4	-	-	-	-	-	-	-	-	-	-	-
	Stage 3	4	-	-	-	-	-	-	-	-	-	-	-

Table 7.4.2 Effect sizes for change between pre- and post-treatment (stages 2 and 3) (PP Es) and between pre-treatment and follow-up (stages 2 and 4) (PF Es) – all groups of interest. (%Imp. = percentage of subjects improving; N.Prof. = Non-professional)

Stress factor	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Managerial Role	PP Es	.25	.25	.25	.17	.27	.28	.26	.29	.13	.19	.32
	%Imp.	49.6	57.1	47.4	39.1	52.0	57.7	50.0	50.5	47.1	50.0	50.7
	N	125	28	97	23	102	26	76	91	34	20	71
	PF Es	.44	.21	.54	-.32	.24	.13	.65	.03	.71	-.35	.16
	%Imp.	40.4	33.3	42.9	28.6	42.5	36.4	44.8	39.5	44.4	20.0	42.9
	N	50	12	38	7	40	11	32	38	9	10	28

Table 7.4.3 Percentage changed (clinically significant and reliable change) for work stress factor - Managerial role

Change			CS and RC		C.S. only		RC only		No change		Deteriorated	
Stress factor	Group		No	%	No	%	No	%	No	%	No	%
Managerial role	Post-treatment	All	17	32.7	7	13.5	6	11.5	19	36.5	3	5.8
		Male	4	33.3	3	25.0	1	8.3	2	16.7	2	16.7
		Female	13	32.5	4	10.0	5	12.5	17	42.5	1	2.5
	Follow-up	All	7	26.9	0	0	1	3.8	15	57.7	3	11.5
		Male	1	11.1	0	0	1	11.1	5	58.3	2	22.2
		Female	6	35.3	0	0	0	0	10	58.8	1	5.9

(percentage in bold; see table 7.3.3 for detail explanation concerning column data above)

Post- treatment results:

N.B: for all subjects (124 -28 males and 96 females) who had pre-treatment scores for this factor; 75 (60.5% - 64.3% of the males and 59.4% of the females) came to the counselling with levels of stress for this factor that were not significantly different from the baseline norm.

Follow-up results:

N.B: for all subjects who had pre-treatment scores for this stress factor 23 (50.0% of total at the follow-up stage – 36.4% of the males and 54.3% of the females) came to the counselling with levels of stress for this factor that were not significantly different from the baseline norm.

7.4.1 Managerial role – All subjects

From table 7.2 it can be seen that the stress levels for ‘Managerial role’ dropped through all the stages 2-4 of the study for all the subjects together. From table 7.4.1 it can be seen that the initial mean total stress created by ‘Managerial role’ for all the subjects coming for counselling was significantly higher than that obtained from the normative baseline mean. This dropped immediately after therapy, though this was still significantly different from

the baseline mean. The means for the post-treatment was significantly different from the pre-treatment mean but not at the follow-up stage. The difference between post-treatment and follow-up was not significant. The mean at follow-up dropped again but it was still significantly different from the baseline mean suggesting the subjects as a whole did not move to a point where the stress was within the normative population.

Table 7.4.2 shows for all the subjects together the mean effect sizes for measuring the strength of the change between the pre- and post means and pre- and follow-up means for all subjects and the percentage who have improved by stage 3. From this can be seen that for 49.6% of all subjects there was a positive effect size. The mean effect size grew at follow-up from .25 to .44 but percentage improving dropped slightly to 40.4%.

Thus for all the subjects there was an improvement in stress levels attributed to 'Managerial role' between pre- and post-treatment, but this was not maintained at follow-up. All that can be said is that by the end of the follow-up period 40.4% had improved.

For the age groupings, the 16-35 year olds did not start with a mean that was significantly different from the baseline mean. The 36-64+ year olds produced significant change as a result of the counselling but were not able to maintain that, as by the follow-up stage, there was no significant difference between stage 2 and stage 4. But the mean for this age group stayed significantly different from the baseline mean and the effect size was just above average by the follow-up stage (.51), yet the percentage improving had fallen from 52% to 42.5% (table 7.4.2).

The professionals in this factor were not able to move their stress levels towards the norm after treatment at any point, as at all stages the mean stayed significantly different from the baseline (stage 1) norm and there was no significant change between stages 2 and 3 or between stage 3 and 4. But the non-professionals, who started at a level that was significantly different from the baseline mean, changed such that the means at both stage 3 and 4 were not significantly different from the norm at stage 1. Further, by the follow-up stage there had been a significant change from stage 2. The effect size for the non-professionals after treatment was very low, but by follow-up, the effect size had improved to above average at .71. So while the professionals had not improved for this factor at any stage, by the follow-up stage the non-professionals had improved.

7.4.2 Managerial role – gender

From table 7.2 it can be seen that the stress levels for ‘Managerial role’ for the males dropped through the stages 2-3 of the study but rose again at stage 4 in contrast to the females where the stress levels continued to fall through all the stages 2-4. The initial mean total stress created by this factor for the males and females coming for counselling was significantly higher than that obtained from the baseline mean obtained from the ‘Well-being’ stage 1 study (see table 7.4.1). The stress score for this factor for the males and the females dropped immediately after therapy to such a point where it was no-longer significantly different from the baseline mean and this was maintained to stage 4, indicating change at both stages. But the change was not significant at any stage for either of the genders.

Table 7.4.2 shows the effect size for the magnitude of the change between the pre- and post means and pre- and follow-up means for the genders and the proportions who had improved. From this can be seen that for 57.1% of the males and 47.4% of the females there was a positive effect size by stage 3 dropping to 33.3% and 40.4% by stage 4 respectively.

Table 7.4.3 gives the percentage of subjects who produced clinically significant and reliable change. The trends shown on an individual level replicated the findings at the group level in that a slightly higher proportion of the males produced clinically significant and reliable change than the females at stage 3 of the study i.e. at the post treatment stage; but by the follow-up stage the proportion of males achieving this dropped from 33.3% to 11.1%, whereas for the females the proportions remained consistent at 32.5-35.3%, though those who produced just clinically significant change dropped by the follow-up stage for both groups to zero. For the subjects as a whole the proportions who achieved clinically significant and reliable change at both stages 3 and 4 was slightly reduced (32.7- 26.9%).

From table 7.4.1 concerning the sub-groups of males in age group 36-64+ and those in the professional group, it is seen that these groups of males made the best progress as a result of the counselling by the post-treatment stage (stage 3). The males in both these groups came with stress significantly higher than the baseline and showed significant improvement at the post-treatment stage. But there was no significant change between stages 2 and 3 or between 2 and 4. This is in contrast with the females in the same age group and professional group. The 36-64+ females showed that there was still a significant

difference between the means at stages 1 and 3 but not between stages 1 and 4. The female professionals achieved this by stage 3.

From table 7.4.2 it can be seen that both the sub-groups of males did not produce good effect sizes at any stage. This is in contrast with the 36-64+ females who produced a higher than average effect size by stage 4 (follow-up) of .65 with 44.8% improving.

(For above significance details - see appendix A5 and C7.2)

7.4.3 Managerial role – summary

Thus from tables 7.2 and 7.4.1, 2 and 3, it would seem that most groups (except 16-35 year olds) arrived with stress levels for the factor ‘Managerial role’ that were significantly higher than that of the baseline norm. The males produced clinically significant change but not a high proportion produced reliable change at the same time through all stages of the study and the proportion that did produce clinically significant change dropped considerably by stage 4. In contrast the 36-64+ year old females produced significant change by stage 4 (the follow-up stage) and a good above average effect size. For the females those producing clinically significant and reliable change at stage 3 rose slightly by stage 4, compared with the males where the proportion had dropped by the follow-up stage.

7.5 Stress Factor - Relationship with others

Table 7.5.1 Showing where there was significant change between stages for the various groups examined. (✓ = p<.001; * = p<.01; + = p<.05; - = no significant difference) (stage 1 = baseline measure; stage 2 = pre-treatment; stage 3 = post-treatment and stage 4 = follow-up).

Stress Factor	Comp. with	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Relationship with others	Stage 1	2	✓	*	✓	-	✓	*	✓	✓	*	+	✓
		3	✓	-	✓	-	=*	-	=*	+	+	-	+
		4	=*	-	+	-	*	=+	-	+	-	-	-
	Stage 2	3	-	+	-	-	-	+	-	-	-	-	-
		4	-	-	-	-	-	-	-	-	-	-	-
	Stage 3	4	-	-	-	-	-	-	-	-	-	-	-

Table 7.5.2 Effect sizes for change between pre- and post-treatment (stages 2 and 3) (PP Es) and between pre-treatment and follow-up (stages 2 and 4) (PF Es) – all groups of interest. (%Imp. = percentage of subjects improving; N.Prof. = Non-professional)

Stress factor	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Relationship With others	PP Es	.19	.59	.07	-.03	.26	.71	.10	.21	.12	.72	.07
	%Imp.	36.8	42.9	35.1	34.8	37.3	46.2	34.2	36.3	38.2	45.0	33.8
	N	125	28	97	21	102	26	76	91	34	20	75
	PF Es	.10	-.63	.35	-.34	.19	-.62	.50	.22	-.38	-.41	.44
	%Imp.	36.1	25.0	40.0	28.6	37.5	27.3	41.4	36.8	33.3	30.0	39.3
	N	47	12	35	6	40	11	29	38	9	10	28

Table 7.5.3 Percentage changed (clinically significant and reliable change) for work stress factor - Relationships with others.

Change			CS and RC		C.S. only		RC only		No change		Deteriorated	
Stress factor		Group	No	%	No	%	No	%	No	%	No	%
Relationships with others	Post-treatment	All	15	36.6	6	14.6	6	14.6	12	29.3	2	4.9
		Male	7	63.6	2	18.2	0	0	2	18.2	0	0
		Female	8	26.7	4	13.3	6	20.0	10	33.3	2	6.7
	Follow-up	All	10	40.0	0	0	3	12.0	9	36.0	3	12.0
		Male	1	14.3	0	0	1	14.3	3	42.9	2	28.6
		Female	9	50.0	0	0	2	11.1	6	33.3	1	5.6

(percentage in bold; see table 7.3.3 for detail explanation concerning column data above)

Post- treatment results:

N.B: for all subjects (127 -28 males and 99 females) who had pre-treatment scores for this factor; 88 (69.3% - 60.7% of the males and 71.7% of the females) came to the counselling with levels of stress for this factor that were not significantly different from the baseline norm.

Follow-up results:

N.B: for all subjects who had pre-treatment scores for this stress factor 27 (55.1% of total at the follow-up stage – 50.0% of the males and 56.8% of the females) came to the counselling with levels of stress for this factor that were not significantly different from the baseline norm.

7.5.1 Relationships with others – All subjects

From table 7.2 it can be seen that the stress levels for ‘Relationships with others’ dropped through the stages 2-3 of the study for all the subjects together but rose again at stage 4 (follow-up). From table 7.5.1 it can be seen that the initial mean total stress created by ‘Relationships with others’ for all the subjects coming for counselling was significantly

higher than that obtained from the normative baseline mean. The means stayed significantly different from the baseline mean through out the stages of the study. The means for the post-treatment and follow-up were not significantly different from the pre-treatment mean. The difference between post-treatment and follow-up was also not significant.

Table 7.5.2 shows for all the subjects together the mean effect sizes for measuring the strength of the change between the pre- and post means and pre- and follow-up means for all subjects and the percentage who have improved. From this can be seen that for 36.8% of all subjects there was a positive effect size by stage 3. The mean effect size for the change for this factor was very low at stages 3 and 4. The percentage improving at stage 4 dropped slightly to 36.1%.

Thus for all the subjects there was a slight improvement in stress levels attributed to 'Relationships with others' between pre- and post-treatment, but this was lost by the follow-up stage. There was no significant change at any stage as a result of the therapy.

For the age groupings, the 16-35 year olds seem to benefit from the counselling only by stage 4. But there was no significant difference in the means between stage 2 and 3 or between stages 3 and 4, and the mean effect size was very low for this age group.

The 36-64+ year olds produced significant change as a result of the counselling but by the follow-up stage this change was no-longer significant. But as the starting stress levels were very much higher than the baseline mean, the levels at post-treatment and follow-up were not reduced to the point where it was no longer significantly different from the baseline mean, though the change was significant at stage 3 (post-treatment) (see table 7.5.1) but the effect size was very low at both stage 3 and 4 (table 7.5.2).

The professionals did not seem to move their stress levels towards the norm at any stage, as, at stages 3 and 4, the means remained significantly different from the baseline mean but the mean at stage 3 was significantly different from the pre-treatment mean but this had disappeared by the stage 4 (follow-up). But for the non-professionals, by the follow-up stage the mean for this factor was no longer significantly different from the baseline mean, but there was no significant change between the means at stage 2 and those at stages 3 and 4.

7.5.2 Relationships with others – gender

From table 7.2 it can be seen that the stress levels for ‘Relationships with others’ for the males dropped through the stages 2-3 of the study but rose again at stage 4 in contrast to the females where the stress levels continued to fall through all the stages 2-4. The initial mean total stress created by this factor for the males and females coming for counselling was significantly higher than that obtained from the baseline mean obtained from the ‘Well-being’ stage 1 study (see table 7.5.1). The stress score for this factor for the both genders remained significantly different from the baseline mean throughout the study, and there were no significant changes as a result of the counselling at any stage of the therapy for either gender examined separately.

Table 7.5.2 shows the effect size for the magnitude of the change between the pre- and post means and pre- and follow-up means for the genders and the proportion who had improved. From this can be seen that 42.9% of the males there was a positive effect size by stage 3. But by the follow-up stage this had dropped to only 25.0% showing improvement. The males also showed a higher than average effect size of .59 at post-treatment but this dropped considerably to a very low level at the follow-up stage.

Table 7.5.3 gives the percentage of subjects who produced clinically significant and reliable change. The trends shown on an individual level replicated the findings at the group level in that a higher proportion of the males produced clinically significant and reliable change than the females at stage 3 of the study i.e. at the post treatment stage; but by the follow-up stage the proportion of males achieving this dropped from 63.6% to 14.3%, whereas for the females the proportion nearly doubled between stages 3 and 4 (26.7% to 50.0%) and in contrast, the proportion of males deteriorating between the stages 3 and 4 went from zero to 28.6%.

From table 7.5.1 concerning the sub-groups of males in age group 36-64+, it is seen that this group of males made progress as a result of the counselling by the post-treatment stage (stage 3), and the change at stage 3 was also significant. But by stage 4 the mean was significantly different from the baseline mean again and the change from stage 2 was no longer significant and in fact the change between stages 3 and 4 was also significant. Thus the males while improving at the post-treatment stage had fallen back to their pre-treatment level. Thus at stage 3 the 36-64+ year old males produced a mean effect size that was above average at .71 with 46.5% of subjects. But by stage 4 the effect size was very low.

The mean for the professional males did change to become no longer significantly different from the baseline mean by stage 3 and that remained the case by stage 4, but there was no significant change at either stage 3 or at stage 4. Thus like the 36-64+ year olds, the professional males produced a very good effect size of .72 with 45% improving but this too dropped to a very low level of effect size by stage 4. The 36-64+ females showed that there was still a significant difference between the means at stages 1 and 3 and between stages 1 and 4, and there was no significant change as a result of the therapy at any stage of the study for this age group of females. The female professionals achieved change such that by stage 4 the mean for this factor was no longer significantly different from the baseline mean, but there was no significant change between stage 2 and 3 or between stages 2 and 4. (For above significance details - see appendix A6, C7.3 and A18.1-2)

7.5.4 Relationships with others – summary

Thus from tables 7.2 and 7.5.1, 2 and 3 all groups arrived with stress levels for the factor ‘Relationships with others’ that were significantly higher than that of the baseline norm. The males on their own, produced a higher proportion, as compared with the females, of those to show clinically significant and reliable change at stage 3 of the study and the 36-64+ year old males as a group managed to gain from the therapy at stage 3 (post-treatment) by producing significant change. Further, the males as a group and the 36-64+ year old males produced effect sizes of .71 and .72 respectively, but neither group was able to sustain that change by stage 4 (follow-up). Only the age group 16-35 and the profession females were able to produce significant change by stage 4.

7.6 Stress factor - Career and achievement

Table 7.6.1 Showing where there was significant change between stages for the various groups examined. (✓ = p<.001; * = p<.01; + = p<.05; - = no significant difference) (stage 1 = baseline measure; stage 2 = pre-treatment; stage 3 = post-treatment and stage 4 = follow-up).

Stress Factor	Comp. with	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Career and achievement	Stage 1	2	✓	✓	✓	-	✓	✓	✓	✓	*	✓	✓
		3	✓	-	=*	-	✓	-	✓	=✓	-	=	*
		4	-	-	-	-	+	-	-	+	+	-	-
	Stage 2	3	-	-	-	-	=+	-	-	-	-	-	-
		4	*	-	=*	-	+	-	+	-	*	-	-
	Stage 3	4	-	-	+	-	-	-	-	-	*	-	-

Table 7.6.2: Effect sizes for change between pre- and post-treatment (stages 2 and 3) (PP Es) and between pre-treatment and follow-up (stages 2 and 4) (PF Es) – all groups of interest. (%Imp. = percentage of subjects improving; N.Prof. = Non-professional)

Stress factor	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Career and achievement	PP Es	.22	.36	.18	.09	.25	.42	.19	.24	.16	.23	.25
	%Imp.	42.4	46.5	41.2	43.5	42.2	46.2	40.8	45.1	35.3	40.0	46.5
	N	125	28	97	23	102	26	76	91	34	20	71
	PF Es	.09	.21	.05	.18	.07	.04	.09	.01	.42	.08	-.01
	%Imp.	40.5	50.0	37.1	42.9	40.0	45.5	37.9	39.5	44.4	50.0	35.7
	N	47	12	35	7	40	11	29	38	9	10	28

Table 7.6.3 Percentage changed (clinically significant and reliable change) for work stress factors – Career and achievement

Change			CS and RC		C.S. only		RC only		No change		Deteriorated	
Stress factor	Group		No	%	No	%	No	%	No	%	No	%
Career and achievement	Post-treatment	All	15	28.8	9	17.3	5	9.6	22	42.3	1	1.9
		Male	2	12.5	4	25.0	4	25.0	6	37.5	0	0
		Female	13	36.1	5	13.9	1	2.8	16	44.4	1	2.8
	Follow-up	All	8	32.0	1	4.0	2	8.0	12	48.0	2	8.0
		Male	2	20.0	1	10.0	0	0	6	60.0	1	10.0
		Female	6	40.0	0	0	2	13.3	6	40.0	1	6.7

(percentage in bold; see table 7.3.3 for detail explanation concerning column data above)

Post- treatment results:

N.B: for all subjects (127 - 27 males and 100 females) who had pre-treatment scores for this factor; 76 (59.8% - 40.7% of the males and 65.0% of the females) came to the counselling with levels of stress for this factor that were not significantly different from the baseline norm.

Follow-up results:

N.B: for all subjects who had pre-treatment scores for this stress factor 26 (53.1% of total at the follow-up stage – 25.0% of the males and 62.2% of the females) came to the counselling with levels of stress for this factor that were not significantly different from the baseline norm.

7.6.1 Career and achievement – All subjects

From table 7.2 it can be seen that the stress levels for ‘Career and achievement’ dropped through all the stages 2-4 of the study for all the subjects together. From table 7.6.1 it can be seen that the initial mean total stress created by ‘Career and achievement’ for all the subjects coming for counselling was significantly higher than that obtained from the normative baseline mean. This dropped immediately after therapy, though this was still

significantly different from the baseline mean. The means for the post-treatment and follow-up were significantly different from the pre-treatment mean. The difference between post-treatment and follow-up was also significant. But the mean at follow-up dropped to a level that was not significantly different from the baseline mean suggesting the subjects as a whole returned to the level of stress of the baseline sample for this factor.

Table 7.6.2 shows for all the subjects together the mean effect sizes for measuring the strength of the change between the pre- and post means and pre- and follow-up means for all subjects and the percentage who have improved. From this can be seen that for 42.4% of all subjects there was a positive effect size by stage 3, and the percentage improving dropped slightly at stage 4 to 40.5%.

Thus for all the subjects there was a consistent improvement in stress levels attributed to 'Career and achievement' between pre- and post-treatment, and this was maintained or even produced further significant change at follow-up. Also by stage 4, at follow-up, the levels of stress for 'Career and achievement' were reduced to further to levels which were not significantly different from the baseline mean.

For the age groupings, the 16-35 year olds received no benefit as a result of the therapy but the mean for this factor was not significantly different from the baseline norm for that group at the beginning stage 2. The 36-64+ year olds and the professionals produced significant change as a result of the counselling and were able to improve on that change by the follow-up stage. But as the starting stress levels were very much higher than the baseline mean, then the levels at post-treatment and follow-up were not reduced to the point where it was no longer significantly different from the baseline mean. The non-professionals results were complicated. At stage 3 the mean had been reduced such that it was no longer significantly different from the baseline norm. But the mean at stage 3 was not significantly different from the mean at stage 2. However, by the follow-up stage, the mean had continued to fall and was now significantly different from the baseline mean in that it was now significantly much lower than that mean. Further at stage 3 the change was not significant but by stage 4 the change from stage 2 was significant as was the change from stages 3 to 4. This indicates that this group continued to improve significantly after therapy and by stage 4 (follow-up) there had been significant change.

7.6.2 Career and achievement – gender.

From table 7.2 it can be seen that the stress levels for ‘Career and achievement’ for the males dropped through the stages 2-3 of the study but rose again at stage 4 in contrast to the females where the stress levels continued to fall through all the stages 2-4. The initial mean total stress created by this factor for the males and females coming for counselling was significantly higher than that obtained from the baseline mean obtained from the ‘Well-being’ stage 1 study (see table 7.6.1). The stress score for this factor for the males did not change significantly at any stage of the therapy. The difference between the baseline mean and the post and follow-up treatment means for this factor for males was not significant. This is in contrast to the females where the means remained significantly different from the baseline mean at the post-treatment (stage 3) point of the study, but by the follow-up stage the females subjects had continued to improve and the mean was such that the level was no longer significantly different from the baseline mean. Further, the means at both stages 3 and 4 showed significant change from the mean at stage 2, as did the mean at stage 4 when compared with that at stage 3.

Table 7.6.2 shows the effect size for the magnitude of the change between the pre- and post means and pre- and follow-up means for the genders and the proportion who improved. From this can be seen 46.5% of the males there was a positive effect size by stage 3 and by the follow-up stage this had risen to 50.0% showing improvement. This is in contrast with the females where at stage 3 only 41.2% had improved and the effect size was under average, and by stage 4 the proportion improving dropped to 37.1%.

Table 7.6.3 gives the percentage of subjects who produced clinically significant and reliable change. The results for the males here differs somewhat from the above factors in that the proportion who achieve this increased at stage 4 compared with that at stage 3 (from 12.5% to 20.0%); females continued to show improvement between the stages as with the other factors (from 36.1% to 40.0% at stage 4). There was little gender difference in the proportions deteriorating by the stage 3 and 4 (the male proportion being slightly higher) though for both genders the proportions increased sharply between stages 3 and 4.

From table 7.6.1 concerning the sub-group of males in age group 36-64+, it is seen that this group of males made progress as a result of the counselling by the post-treatment stage (stage 3). The males in this group came with stress significantly higher than the baseline and showed significant improvement at the post-treatment stage. For this group the means were not significantly different from the baseline mean at both stages 3 and 4. But while

the mean at stage 3 showed significant change as compared with that at stage 2, this was lost by stage 4 in that the pre-treatment and follow-up means were no longer significantly different. This is in contrast with the females in the same age group where the means at stages 2 and 3 remained significantly different from the baseline norm and only by stage 4 was the mean no longer significantly different from the baseline norm, indicating only at the follow-up stage was there significant change for the age group of females. Also only at stage 4 was there a significant difference between that mean and that at stage 2. The mean at stage 4 was also significantly different from that at stage 3, indicating that the females of this group continued to improve up to the follow-up and after the end of therapy. The female professionals showed no significant difference between the means at stages 1 and 4, but there were no significant changes between stage 2 and 3 and stage 2 and 4.

From table 7.6.2 it can be seen that, the females separately and the 36-64+ year old females all managed significant change by the follow-up stage. But no group produced any above average effect sizes for that change. (For above significance details - see appendix A7 and C7.4)

7.6.4 Career and achievement – summary

All the subject together, the females separately and the 36-64+ year old females all managed significant change by the follow-up stage, and for the females as individuals a higher proportion produced clinically significant and reliable change than the males, though unusually, the males increased the proportion who achieved this at stage 4 as compared with their level at stage 3. Further, non-professionals also produced significant change at the follow-up stage but the mean at stage 4 was significantly different from the baseline mean as it had dropped to become significantly less than the baseline mean. But no group produced any above average effect sizes for that change.

7.7 Stress Factor - Organisational structure and climate

Table 7.7.1: Showing where there was significant change between stages for the various groups examined. (✓ = $p < .001$; * = $p < .01$; + = $p < .05$; - = no significant difference) (stage 1 = baseline measure; stage 2 = pre-treatment; stage 3 = post-treatment and stage 4 = follow-up).

Stress factor	Comp. with	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Organisation structure and climate	Stage 1	2	✓	✓	✓	-	✓	✓	✓	✓	*	=✓	✓
		3	✓	-	✓	-	✓	-	✓	*	-	=+	+
		4	-	-	-	-	+	-	-	-	-	-	-
	Stage 2	3	+	-	-	-	+	-	-	+	-	-	+
		4	*	-	*	-	*	-	*	-	+	-	-
	Stage 3	4	-	-	-	-	-	-	-	-	-	-	-

Table 7.7.2 Effect sizes for change between pre- and post-treatment (stages 2 and 3) (PP Es) and between pre-treatment and follow-up (stages 2 and 4) (PF Es) – all groups of interest. (%Imp. = percentage of subjects improving; N.Prof. = Non-professional)

Stress factor	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Organisation structure and climate	PP Es	.32	.27	.33	.23	.35	.32	.36	.44	.00	.33	.47
	%Imp.	56.0	57.1	55.7	60.9	54.9	57.7	53.9	59.3	47.1	50.0	62.0
	N	125	28	97	21	102	26	76	91	34	20	71
	PF Es	.29	.14	.34	-.38	.36	.04	.48	.17	.78	.08	.20
	%Imp.	53.2	50.0	54.3	57.1	52.5	45.5	55.2	47.4	66.7	40.0	46.4
	N	47	12	35	6	40	11	29	38	9	10	28

Table 7.7.3 Percentage changed (clinically significant and reliable change) for work stress factor -Organisational structure and climate

Change			CS and RC		C.S. only		RC only		No change		Deteriorated	
Stress factor		Group	No	%	No	%	No	%	No	%	No	%
Organisational structure and climate	Post-treatment	All	19	28.8	6	9.1	9	13.6	29	43.9	3	4.5
		Male	3	20.0	3	20.0	0	0	8	53.3	1	6.7
		Female	16	31.4	3	5.9	9	17.3	21	41.2	2	3.9
	Follow-up	All	9	40.9	1	4.5	7	31.8	5	22.7	0	0
		Male	2	33.3	0	0	2	33.3	2	33.3	0	0
		Female	7	43.8	1	6.3	5	31.3	3	18.8	0	0

(percentage in bold; see table 7.3.3 for detail explanation concerning column data above)

Post- treatment results:

N.B: for all subjects (129 -30 males and 99 females) who had pre-treatment scores for this factor; 66 (51.2% - 53.3% of the males and 50.5% of the females) came to the counselling with levels of stress for this factor that were not significantly different from the baseline norm.

Follow-up results:

N.B: for all subjects who had pre-treatment scores for this stress factor 25 (53.2% of total at the follow-up stage – 50.0% of the males and 54.3% of the females) came to the counselling with levels of stress for this factor that were not significantly different from the baseline norm.

7.7.1 Organisational structure and climate – All subjects

From table 7.2 it can be seen that the stress levels for ‘Organisational structure and climate’ dropped through all the stages 2-4 of the study for all the subjects together. From table 7.7.1 it can be seen that the initial mean total stress created by ‘Organisational structure and climate’ for all the subjects coming for counselling was significantly higher than that obtained from the normative baseline mean. This dropped immediately after therapy, though this was still significantly different from the baseline mean. The means for the post-treatment and follow-up were significantly different from the pre-treatment mean. The difference between post-treatment and follow-up was not significant. Though the mean at follow-up dropped further from the post-treatment level it was still significantly higher than the baseline norm so the therapy had not brought the level for this group of subjects to within the functional population for this factor.

Table 7.7.2 shows for all the subjects together the mean effect sizes for measuring the strength of the change between the pre- and post means and pre- and follow-up means for all subjects and the percentage who have improved. From this can be seen that for 56.0% of all subjects there was a positive effect size by stage 3, and the percentage improving dropped slightly at stage 4 to 53.2%.

Thus for all the subjects there was a consistent improvement in stress levels attributed to ‘Organisational structure and climate’ between stages 2-4 (pre-, post-treatment and follow-up) and though there was significant change as a result of the therapy, the mean for the subjects as a group was not reduced to such a point as to put them within the norm for that group but this may have been because as a group the mean starting point was very much higher than the norm from stage 1.

For the age groupings, the 16-35 year olds received no benefit as a result of the therapy though to start with the mean for this factor was just significantly different from the baseline norm for that group at the beginning stage 2 and dropped at stage 3 where it was no-longer significantly different from the stage 1 mean. The 36-64+ year olds and the professionals produced significant change as a result of the counselling and the 36-64+ year olds were able to sustain that change to stage 4, whereas the professions were not able to. But the mean for both groups at all stages of the study remained significantly different from the baseline mean. This was not the situation for the non-professionals who by the follow-up stage had changed significantly and were within the normative baseline population's mean (within one standard deviation).

7.7.2 Organisational structure and climate – gender

From table 7.2 it can be seen that the stress levels for 'Organisational structure and climate' for the males dropped through the stages 2-3 of the study but rose again at stage 4 in contrast to the females where the stress levels continued to fall through all the stages 2-4. The initial mean total stress created by this factor for the males and females coming for counselling was significantly higher than that obtained from the baseline mean obtained from the 'Well-being' study (see table 7.7.1). The stress mean for this factor for both the males and females had change significantly by stage 4 such that it was then no longer significantly different from the baseline mean. The difference between the genders was that for the females there was also a significant change for stages 3 and 4 but not for the males on their own.

Table 7.7.2 shows the effect size for the magnitude of the change between the pre- and post means and pre- and follow-up means for the genders and the proportion who improved. From this can be seen 57.1% of the males there was a positive effect size by stage 3. But by the follow-up stage this had dropped to 50.0% showing improvement. Similarly for the females at stage 3, 55.7% had improved and at stage 4 the proportion improving dropped slightly to 54.3%.

Table 7.7.3 gives the percentage of subjects who produced clinically significant and reliable change. For this factor there were somewhat different results when compared with the other factors. Here, at stage 3 the proportion of males (20.0%) who produced clinically significant and reliable change was lower than the females where the proportion was 31.4%. But by the follow-up stage (stage 4) unlike the first four factors the proportion of males producing clinically significant and reliable change rose as did that of the females

i.e. to 33.3% and 43.8% respectively. Further, by the follow-up stage, none of either gender showed any deterioration.

From table 7.7.1 concerning the sub-group of males in age group 36-64+ and the professionals, it is seen that these groups of males made progress as a result of the counselling by the follow-up stage (stage 4). The males in these groups came with stress significantly higher than the baseline and this remained so to the post-treatment stage. For these two groups the means were not significantly different from the baseline mean at stage 4. But there was no significant change between stage 2 and stages 3 and 4. This is contrast with the females in the 36-64+ age group and the professional females who experience significant change by stage 4.

From table 7.7.1 it can be seen that, the females separately and the 36-64+ year old females all managed significant change by the follow-up stage. But no group produced any above average effect sizes for that change. (For above significance details - see appendix A8 and C7.5)

7.7.4 Organisational structure and climate – summary.

All the subjects together, the females separately and the 36-64+ year olds and professional females all managed significant change by the follow-up stage. Further, non-professionals also produced significant change at the follow-up stage. But no group produced any above average effect sizes for that change overall but the percentages of each group who did improve did rise remarkably within this factor. The difference for this work stress factor was that, by the follow-up stage, the proportion of males producing clinically significant and reliable change increased.

7.8 Stress factor - Home/work interface

Table 7.8.1 Showing where there was significant change between stages for the various groups examined. (✓ = $p < .001$; * = $p < .01$; + = $p < .05$; - = no significant difference) (stage 1 = baseline measure; stage 2 = pre-treatment; stage 3 = post-treatment and stage 4 = follow-up).

Stress factor	Comp. with	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Home/work interface	Stage 1	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		3	✓	*	✓	+	✓	+	✓	✓	*	*	*
		4	=✓	+	*	-	✓	+	*	*	-	-	-
	Stage 2	3	*	+	+	+	+	+	-	✓	-	+	*
		4	=✓	-	*	-	+	-	+	-	✓	-	+
	Stage 3	4	-	-	-	-	-	-	-	-	✓	-	-

Table 7.8.2 Effect sizes for change between pre- and post-treatment (stages 2 and 3) (PP Es) and between pre-treatment and follow-up (stages 2 and 4) (PF Es) – all groups of interest. (%Imp. = percentage of subjects improving; N.Prof. = Non-professional)

Stress factor	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Home/work interface	PP Es	.34	.42	.32	.52	.31	.44	.27	.47	-.01	.52	.46
	%Imp.	58.6	64.1	57.6	52.2	60.2	65.4	58.4	46.3	48.2	70.0	45.3
	N	126	28	98	21	103	26	77	92	34	20	72
	PF Es	.53	.39	.57	.64	.53	.44	.56	.56	.38	.48	.60
	%Imp.	63.9	50.1	65.7	57.1	62.5	54.5	65.5	60.5	66.7	60.0	60.7
	N	47	12	35	6	40	11	29	38	9	10	28

Table 7.8.3 Percentage changed (clinically significant and reliable change) for work stress factors - Home/work interface

			CS and RC		C.S. only		RC only		No change		Deteriorated	
Stress factor		Group	No	%	No	%	No	%	No	%	No	%
Home/work interface	Post-treatment	All	21	29.2	10	13.9	14	19.4	23	31.9	4	5.6
		Male	5	31.3	4	25.0	1	6.3	6	37.5	0	0
		Female	16	28.6	6	10.7	13	23.2	17	30.4	4	7.1
	Follow-up	All	10	31.3	3	9.4	6	18.8	11	34.4	2	6.3
		Male	3	33.3	0	0	1	11.1	4	44.4	1	11.1
		Female	7	30.4	3	13.0	5	21.7	7	30.4	1	4.3

(percentage in bold; see table 7.3.3 for detail explanation concerning column data above)

Post- treatment results:

N.B: for all subjects (124 -28 males and 96 females) who had pre-treatment scores for this factor; 56 (45.2% - 42.9% of the males and 45.8% of the females} came to the counselling with levels of stress for this factor that were not significantly different from the baseline norm.

Follow-up results:

N.B: for all subjects who had pre-treatment scores for this stress factor 18 (37.5% of total at the follow-up stage – 33.3% of the males and 38.9% of the females) came to the counselling with levels of stress for this factor that were not significantly different from the baseline norm.

7.8.1 Home/work interface – All subjects

From table 7.2 it can be seen that the stress levels for ‘Home/work interface’ dropped through all the stages 2-4 of the study for all the subjects together. From table 7.8.1 it can be seen that the initial mean stress created by ‘Home/work interface’ for all the subjects coming for counselling was significantly higher than that obtained from the normative baseline mean. This dropped immediately after therapy, and to the follow-up stage, though continued to be significantly different from the baseline mean, but then the mean for the counselling group at stage 2 was considerable higher than the baseline mean at stage1. The means for the post-treatment and follow-up were significantly different from the pre-treatment mean. The change between post-treatment and follow-up was not significant.

Table 7.8.2 shows for all the subjects together the mean effect sizes for measuring the strength of the change between the pre- and post means and pre- and follow-up means for all subjects and the percentage who had improved. From this can be seen that for 58.6% of all subjects there was a positive effect size by stage 3, and the percentage improving rose at stage 4 to 63.9% and there was a mean effect size at stage 4 of .53.

Thus for all the subjects there was a consistent improvement in stress levels attributed to ‘Home/work interface’ between stages 2-4 (pre-, post-treatment and follow-up) and the change was significant but did not bring the subjects as a group to a level where the mean was not significantly different from the baseline mean i.e. bringing them to a point where they were scored at a level equivalent to the functioning baseline normative population, as the subjects’ group mean starting point was very much higher than the norm from stage 1.

For the age groupings, the 16-35 year olds managed by the follow-up stage to produced change by stage 3 but this was lost by stage 4. The 36-64+ year olds and the professionals did not produce change as the means for both groups at stages 2-4 remained significantly

different from the mean at stage 1. The therapy did however produce significant change for the 36-64+ year olds through stage 3 and 4, but for the professionals this was only the case at stage 3.

7.8.2 Home/work interface – gender

From table 7.2 it can be seen that the stress levels for ‘Home/work interface’ for the males dropped through the stages 2-3 of the study but rose again at stage 4 in contrast to the females where the stress levels continued to fall through all the stages 2-4. The initial mean stress created by this factor for the males and females coming for counselling was significantly higher than that obtained from the baseline mean obtained from the ‘Well-being’ study (see table 7.8.1). The stress mean for this factor for both the males and females had change significantly by stage 3, but it had not change sufficiently to bring the mean down to a level where it was no-longer significantly different from the baseline mean.

Table 7.8.2 shows the effect size for the magnitude of the change between the pre- and post means and pre- and follow-up means for the genders and the proportion who improved. From this can be seen for 64.1% of the males there was a positive effect size by stage 3. By the follow-up stage this had dropped to 50.1% showing improvement. For the females at stage 3, 57.6% had improved and at stage 4 the proportion improving rose considerably to 65.7% with a mean effect size of .57.

Table 7.8.3 gives the percentage of subjects who produced clinically significant and reliable change. For this factor there were somewhat different results when compared with the other previous factors other than ‘Organisational structure and climate’. Here, at stage 3 the proportion of males who produced clinically significant and reliable change was similar to that of the females (31.3% and 28.6% respectively). By the follow-up stage (stage 4) unlike previous factors the proportion of males producing clinically significant and reliable change rose to a level higher than that the females (33.3% compared with 30.4%). Further, unlike with most of the other work stress factors, no males deteriorated by stage 3 but by stage 4 this increased to 11.1%, (the only other factor to be like this was ‘Factors intrinsic to the job’ where the level of deteriorating males at both stages 3 and 4 was 0%).

From table 7.8.1 the sub-group of males in the 36-64+ age group produced similar results to the males as a whole where there was only significant change to stage 3 but this was lost

by stage 4. The professional group of males produced significant change by stage 3 but this was lost by stage 4. The females in the 36-64+ age group were not able to produce change to bring the means to lie within the baseline normative level by stage 4, though there was a significant change as a result of the therapy at the follow-up stage. The professional females were able to produce significant change to reduce the stress to within the baseline population and the therapy produced significant change from stage 1.

From table 7.8.1 it can be seen that, none of the males groups nor the non-professionals managed to produce an above average mean effect size for the changes between the stages 2 to 3 and 2 to 4, all the other groups managed to do this. (*For above significance details - see appendix A9 and C7.6*)

7.8.4 Home/work interface – summary

Only the professional females and the non-professionals managed to produce significant change by the follow-up stage. Most of the groups produced an above average effect size except the males alone or in any of the groups. For the males the difference for this factor was that the proportion of males achieving clinically significant and reliable change, not only did the proportion not drop by the follow-up stage but, unlike any of the other factors, the proportion at stage 4 was higher than that for the females.

7.9 Stress factor - Total work stress

Table 7.9.1 Showing where there was significant change between stages for the various groups examined. (✓ = $p < .001$; * = $p < .01$; + = $p < .05$; - = no significant difference) (stage 1 = baseline measure; stage 2 = pre-treatment; stage 3 = post-treatment and stage 4 = follow-up).

Stress factor	Comp. with	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Total work stress	Stage 1	2	✓	✓	✓	*	✓	✓	✓	✓	=✓	✓	✓
		3	✓	-	✓	-	✓	-	✓	=✓	-	+	*
		4	-	-	-	-	+	-	-	-	-	-	-
	Stage 2	3	*	+	-	-	=*	+	-	*	-	-	+
		4	✓	-	*	-	*	-	=✓	-	*	-	+
	Stage 3	4	+	-	+	-	-	-	+	-	+	-	-

Table 7.9.2 Effect sizes for change between pre- and post-treatment (stages 2 and 3) (PP Es) and between pre-treatment and follow-up (stages 2 and 4) (PF Es) – all groups of interest. (%Imp. = percentage of subjects improving; N.Prof. = Non-professional)

Stress factor	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Total work stress	PP Es	.48	.65	.44	.92	.39	.73	.27	.45	.57	.72	.38
	%Imp.	62.7	75.0	59.2	60.9	63.1	80.8	57.1	65.2	52.9	75.0	61.1
	N	126	28	98	23	103	26	77	92	34	20	72
	PF Es	.49	.03	.64	-.03	.58	-.03	.79	.48	.57	.01	.63
	%Imp.	60.0	50.0	63.2	57.1	60.5	45.5	65.6	56.1	55.6	40.0	58.1
	N	50	12	38	7	43	11	32	41	9	10	31

Table 7.9.3 Percentage changed (clinically significant and reliable change) for work stress factors - Total work stress

			CS and RC		C.S. only		RC only		No change		Deteriorated	
Stress factor		Group	No	%	No	%	No	%	No	%	No	%
Total work stress	Post-treatment	All	18	26.1	6	8.7	16	23.2	28	40.6	1	1.4
		Male	4	21.1	1	5.3	6	31.6	7	36.8	1	5.3
		Female	14	28.0	5	10.0	10	20.0	21	42.0	0	0
	Follow-up	All	10	33.3	2	6.7	5	16.7	9	30.0	4	13.3
		Male	1	10.0	1	10.0	0	0	5	50.0	3	30.0
		Female	9	45.0	1	5.0	5	25.0	4	20.0	1	5.0

(percentage in bold; see table 7.3.3 for detail explanation concerning column data above)

Post- treatment results:

N.B: for all subjects (125 -27 males and 98 females) who had pre-treatment scores for this factor; 57 (45.6% - 33.3% of the males and 49.0% of the females) came to the counselling with levels of stress for this factor that were not significantly different from the baseline norm.

Follow-up results:

N.B: for all subjects who had pre-treatment scores for this stress factor 24 (48.0% of total at the follow-up stage – 41.7% of the males and 50.0% of the females) came to the counselling with levels of stress for this factor that were not significantly different from the baseline norm.

7.9.1 Total work stress – All subjects

From table 7.2 it can be seen that the stress levels for ‘Total work stress’ dropped through all the stages 2-4 of the study for all the subjects together. From table 7.9.1 it can be seen that the initial mean stress created by ‘Total work stress’ for all the subjects coming for counselling was significantly higher than that obtained from the normative baseline mean. This dropped immediately after therapy, and to the follow-up stage though continued to be significantly different from the baseline mean, until stage 4 (follow-up) when the mean

was no longer significantly different from the baseline norm. Further the change to stages 3 and 4 from stage 2 were also significant. Thus for the subjects as a whole for the 'Total work stress' the counselling produced significant change.

Table 7.9.2 shows for all the subjects together the mean effect sizes for measuring the strength of the change between the pre- and post means and pre- and follow-up means for all subjects and the percentage who had improved. From this can be seen that for 62.7% of all subjects there was a positive effect size by stage 3, but the percentage improving dropped slightly at stage 4 to 60.0%. Thus for all the subjects there was a consistent improvement in stress levels attributed to 'Total work stress' between stages 2-4 (pre-, post-treatment and follow-up) and the change was significant.

For the age groupings, the 16-35 year olds managed by the post-treatment stage (stage 3) to produced significant change towards the baseline mean but the change from stage 2 to stage 3 was not significant. The 36-64+ year olds were not able to produce change towards the baseline mean as the mean remained significantly different from the baseline mean, but the change as a result of the counselling was significant. But the professions were able to do better as a result of the therapy as their mean was reduced such that it was no longer significantly different from the baseline mean and the change as a result of the counselling i.e. between stages 2 and stages 3 and 4 was significant, however, the effect size for the change for this group at both stage 3 and 4 was not good. The mean effect size for the change for the non-professionals was, however, good at both stage 3 and 4 (.57 for both stages).

7.9.2 Total work stress – gender

From table 7.2 it can be seen that the stress levels for 'Total work stress' for the males dropped through the stages 2-3 of the study but rose again at stage 4 in contrast to the females where the stress levels continued to fall through all the stages 2-4. The initial mean stress created by this factor for the males and females coming for counselling was significantly higher than that obtained from the baseline mean obtained from the 'Well-being' study (see table 7.9.1). The stress mean for this factor for the males remained significantly different from the baseline mean to stage 4, so for the males there was insufficient shift towards the baseline norm. But this was not the case for the females where the mean by stage 4 was not significantly different from the baseline norm and the changes at both stage 3 and 4 were also significant.

Table 7.9.2 shows the effect size for the magnitude of the change between the pre- and post means and pre- and follow-up means for the genders and the proportion who improved. From this can be seen 75.0% of the males there was a positive effect size by stage 3. By the follow-up stage this had dropped to 50.0% showing improvement. But for the females at stage 3; 59.2% had improved and at stage 4 the proportion improving rose considerably to 63.2% with a mean effect size of .64.

Table 7.9.3 gives the percentage of subjects who produced clinically significant and reliable change. As 'Total work stress' was the mean of the sum of all the other work stress factors, the results for this factor tended to underline the trends shown throughout the findings, that is, the differences in responses between the males and the females. Here, at stage 3 the proportion of males who produced clinically significant and reliable change was 21.1% as compared to the females where the proportion was 28.0%. But by the follow-up stage (stage 4) the differences were as seen throughout most of the findings i.e. the proportion of males who produced clinically significant and reliable change dropped to 10.0% whereas for the females this rose to 45.0%. Further, by the follow-up stage, unlike the females and like most of the other factors (except the factors 'Factors intrinsic to the job' and 'Organisational structure and climate'), the proportion of males who appear to have deteriorated was quite high; for this factor it rose from 5.3% at post-treatment to 30.0% of the males at the follow-up stage.

From table 7.9.1 the sub-group of males in the 36-64+ age group produced similar results to the males as a whole where there was only significant change between stages 2 and 3 but this was lost by stage 4. The professional group of males produced no significant change at any stage of the study. The females in the 36-64+ age group and the professional group were able to produce significant change at stage 4 in that the mean for the group was no longer significantly higher than the baseline norm and the change between stages 2 and 4 was also significant.

From table 7.9.1 it can be seen that, the females separately and the 36-64+ year old and professional females all managed significant change by the follow-up stage, and those groups also produced .64, .79 and .63 mean effect sizes, respectively. Further, the males in both the 36-64+ age group and in the professional group produce very good effect sizes for the change at the post-treatment stage (.73 and .72 respectively), but by the follow-up stage the effect sizes for the change for both groups was very low. (For above significance details - see appendix A10 and C7.7)

7.9.4 Total work stress – summary

The total stress experienced by these subjects overall was reduced through the three stages of the counselling study. This was also the case for the females but the males' levels of stress increased again by the follow-up stage. This was reflected in the proportions of males and females who produced clinically significant and reliable change. At post treatment the males produced a slightly lower proportion achieving this than the females but this dropped considerably by the follow-up stage and at this stage the proportion of males deteriorating increased considerably. Generally the females on their own; the 36-64+ year old females and both professional groups produced significant change and the mean for each group move to be within the normative baseline mean. This occurred for these groups at stage 3, (post-treatment). For the non-professionals this only occurred at the follow-up stage. The gender differences was also highlighted by the males producing above average effect sizes for the change at the post-treatment stage for the males on their own, the 36-64+ year old males and the male professionals. By the follow-up stage this changed completely in that it was the female groups only that produced above average effect sizes for the change. This was the case for the females on their own, for the 36-64+ females, the female professional and the non-professionals as a group themselves.

7.10 Work stress costs

In Chapter 6 it was calculated that the mean cost for the counselling client altogether was £504 per subject (at 2008 rate) for their stress (*males: £392 and females: £545, at 2008 rates, i.e. multiplying the figures by 33.90%*). In Chapter 2 it was suggested that at the time an EAP programme was costing £33 per head per year (£44). The total of all the subjects (224 = number of subjects producing this figure) was costing the organisation £112,900 (males {60} = £23,500; females {164} = £89,400). From the above findings by the follow-up stage the mean total work stress for all the subjects together had been reduced by 16.3% (taking the follow-up mean from the pre-treatment mean and dividing that figure by the pre-treatment mean); for the males the reduction was 1.9% and for the females the figure was 18.2%. Using the above 2008 figures this would be the equivalent of a saving of £82.15p per head for the subjects as a whole or £7.45p per head for the males and £99.19p per head for the females. This would indicate that for the subjects as a whole the saving was 1.6:1 and for the females a saving of 1.8:1 (using £44 per head as the unit cost for counselling at the calculated 2008 cost rate); but from the above figures the service to the males showed a loss of 80% of the cost for counselling and thus for the males the counselling would not seem to be cost effective if the measure used was only the

resulting reduction in total stress after counselling. However, overall the counselling produced an estimated cost saving of £15,800 in stress for the counselling subjects at 2008 cost levels.

However, another way to calculate the saving as a result of the counselling would be to compute the change in levels of presenteeism which allows for direct calculations involving proportions of salary lost/gained in relationship to respondents' subjective ratings concerning their levels of work efficiency/effectiveness. In chapter 6 the mean presenteeism cost was calculated as £6,161 (£8250) per counselling subject per year. The increase in presenteeism as a result of the counselling was 7.52%, however, as there was a slight drop in the level of presenteeism by the follow-up stage, to 6.69%, this would give a mean saving of £412 (£552) per head for the counselling subjects for the EAP in 1996 compared with the £33 (£44) per person (*approximate ratio of 12.5:1*). Thus the saving for all the subjects together (155 = those producing this data) coming for counselling would have been £63,000 (£85,000) for increasing the presenteeism. This figure cannot be added to the above figure for the savings calculated for reducing stress as this figure can be said to be included in the above figure.

However, as the genders responded differently it may be important to cost the saving for each gender separately. If the mean presenteeism was costing £7,444 (£9968) per counselling male per year, then the saving on the increase of presenteeism of 8.14% was that percentage of that total, i.e. £606 (£811). However, as there was a drop in the level of presenteeism at follow-up for the males, the change in the level to that stage was only 1.31%, which would give a saving of £98 (£131) {or approximate ratio of 3:1} per male per year. Thus the saving for all the males together coming for counselling (47) was £4,606 (£6,157) at 1996 (2008) cost levels for increasing presenteeism for the males, which would suggest that overall for the males the cost for the EAP was good value.

If the mean presenteeism cost was £5,602 (£7,501) per counselling female, then the saving on just the increase of presenteeism of 7.74% was that percentage of that total, i.e. £434 (£581). However, as there was a small drop in the level of presenteeism at follow-up for the females, the change in the level to that stage was 7.38%, which would give a saving of £413 (£553){*or ratio of 13:1*} per female per year. Thus the saving for all the females together, coming for counselling, (155) would have been £64,015 (£85,715) for increasing presenteeism for the females, which would suggest that overall, for the females, the saving as a result of the counselling, was very good. Thus the saving for the changes in levels of

presenteeism alone for the females makes the value of an EAP programme very cost effective.

Calculating the factors in this way would seem to suggest that for these subjects the counselling process was cost effective in reducing the 'Total work stress' and increasing the levels of presenteeism of the subjects as a whole, but even more beneficial for the females. The ratio of savings for the females ranged between 13:1 to 1.8:1 and for the males the savings ratio ranged between a loss of 1:5 and a saving of 3:1 (for the increase in presenteeism) and for the group as a whole the savings cost ratio ranged between 12.5:1 to 1.6:1 all at stage 4, the follow-up stage.

(Figures in italics are those converted to 2008 costs using the inflation rate from July, 1996 to December, 2008 to be taken as being 33.90% {InflationData.com}).

7.11 Summary

Thus to summarise all the findings, for the males there was an improvement in stress levels attributed to all the stress factors between pre- and post-treatment and for the factors 'Factors intrinsic to the job', 'Managerial role', 'Relationships with others' and 'Career and achievement', the post-treatment scores were reduced to a levels which were not significantly different from the normative baseline mean. But there was only significant change at stage 3 for 'Factors intrinsic in the job' and 'Relationships with others' and 'Home/work interface and 'Total work stress' but by stage 4 this had been lost for all the stress factors for the males.

The male group that seem to benefit the most was the 36-64+ year olds where for most of the factors the change to the post-treatment stage was significant. 'Organisational structure and climate' and 'Home/work interface' were the only factors where the males increase the proportion of those producing clinically significant and reliable change from stage 3 to stage 4. But 'Organisational structure and climate'; together with, 'Managerial role'; 'Relationships with others'; 'Career and achievement' and 'Total work stress' were the factors where, by the follow-up stage, the proportion of males who deteriorated was considerably higher compared with 'Factors intrinsic to the job' and 'Organisational structure and climate'. Also at the follow-up stage for 'Total work stress', the proportion of males producing clinically significant and reliable change was less than half of the proportion who produced this at the post-treatment stage. The males were only able to produced above average mean effect sizes for the change at the post-treatment stage (stage

3) for 'Factors intrinsic to the job'; 'Relationships with others' and 'Total work stress' (the males alone, 36-64 males and professional males); and 'Home/work interface' (professional males only). For the males by the follow-up stage (stage 4) no group produced above average mean effect size.

The females overall, as with the males, came to counselling with stress levels that were significantly greater than the baseline norm for all the work stress factors. For most of the work stress factors they were able to reduce this stress to a level where it was no-longer significantly higher than the baseline means by the follow-up stage. The exceptions were for 'Managerial role' where this occurred earlier at the post-treatment stage; 'Relationships with others', where the stress level remained significantly higher than the baseline norm at all stages of the study; and for 'Home/work interface' where like the males, the starting point was so much higher than the baseline norm and that, although the stress level was reduced considerably through the stages of the study, it was not reduced enough to make it not significantly different from the baseline mean. Amongst the females, the factors 'Relationships with other'; 'Organisational structure and climate' and 'Total work stress' showed the highest proportion of subjects who produced clinically significant and reliable change, at the follow-up stage as compared with the other factors. At the post-treatment stage none of the female groups were able to show an above average mean effect size, but by stage 4 (follow-up) all the female groups produced above average effect sizes for change for the factors, 'Factors intrinsic to the job'; 'Managerial role'; 'Home/work interface' and 'Total work stress'.

The age group of 36-64+ year olds as a whole and the females in this age group benefited the most from the counselling process in producing significant change by post-treatment or at least by the follow-up stage for most of the work stress factors except for 'Relationships with others' and 'Home/work interface'. But they were able by stage 4 to produce above average mean effect sizes for factors; 'Factors intrinsic to the job'; 'Managerial role'; 'Home/work interface' and 'Total work stress'. The professional females also benefited well from the counselling process in producing significant change, for all factors except 'Relationships with others' and 'Career and Achievement' and produced above average effect sizes at stage 4 for factors 'Home/work interface' and 'Total work stress'. The non-professionals produced significant change as a result of the counselling at least by the follow-up stage (stage 4) for all stressors except for 'Relationships with others' and they produced above average effect sizes for that change by stage 4 for factors 'Factor intrinsic to the job'; 'Managerial role'; 'Organisational structure and climate' and 'Total work

stress'. The 16-35 year olds, who were mostly females, produced significant change for 'Factors intrinsic to the job' and 'Home/work interface' at least to stage 3. They were also the only group to produce an above average mean effect size at both stages 3 and 4 for 'Home/work interface'.

The cost effectiveness of the counselling process was calculated using the proportion of subjects who showed improvement both with respect to the reductions they experienced as a group with respect to the levels of their total work stress and their related increases in presenteeism. Calculating the cost savings for these variables indicated that for these subjects the counselling process was cost effective in reducing the 'Total work stress' and increasing the levels of presenteeism of the subjects as a whole, but the process was more beneficial for the females. The ratio of savings for the females range from 13:1 to 1.8:1 and for the males the savings ratio ranged between a loss of 1:5 to a gain of 3:1 and for the group as a whole the savings cost ratio ranged between 13:1 to 1.6:1 all at stage 4, the follow-up stage.

8. Results from stages 2-4: Analysis of the counselling data - Mental health, Work and Personal functioning

8.1 Introduction

The chapters 5 and 6 analysed the group data from the stages 1 and 2 of the study focussing on the groups of subjects that were of interest in this study and the difference between the proportions of each of the groups with respect to stage 1 (baseline well-being study) and stage 2 (client assessment/pre-treatment stage). This chapter will focus on the differences in responses and the changes that these groups made through the treatment of the brief therapy within the EAP service as offered to the organisation (Norfolk County Council) by the EAP provider by their counselling affiliates. The focus of this chapter will be the changes through stages 2 (pre-treatment); 3 (post-treatment) and 4 (six month follow-up) for the variables called ‘mental health, work and personal functioning’. The results were derived from the subjects’ scores through the three stages 2-4 for the questions which focussed on these variables. The groups that will be the focus of this chapter and the structure for the presentation of the data will be similar to that presented in chapter 7 and thus was described in the introduction of that chapter.

However in this chapter for the mental health scores, the higher means indicated higher/better mental health; for both work and personal functioning a lower mean indicated better work or personal functioning, as the scores run down the column under ‘mean’ it is possible to see how the means rise (or drop – in the cases of work and personal functioning) or not through the stages 2-4. Also the range used to indicate that the clients had moved to a point within normative functioning used normative data from other studies and not from the baseline study where this measurement was not used (i.e. mental health – Jenkinson et al, 1997; work and personal functioning – Worrall, 1999).

(For the full tables showing the three forms of measure mentioned above for the present variables, see appendix A18: tables A18.5-15 and appendixes C8.1-3 which includes the correlation data).

8.2 Mental health, work and personal functioning

Below, in table 8.2 is presented the means for each of the variables mental health, work and personal functioning at each of the stages 2-4 of the study for all the subjects together and for each of the genders separately. Pre-treatment mean is at stage 2 of the study and post-treatment and follow-up means are those at stage 3 and 4 of the study respectively; for

mental health, the higher the mean the better the mental health; for work and personal functioning the lower the mean the better the functioning.

It may be also important as a brief reminder, to present again the questions that focussed on measuring these variables and how the various scores were calculated.

Mental health:

This scale asked: *How much time during the last four weeks have you...*

1. *been a very nervous person?*
2. *felt down in the dumps, that nothing would cheer you up?*
3. *felt calm and peaceful?*
4. *felt downhearted and blue?*
5. *been a happy person?*

The mental health subscale, the MHI-5, consists of five items measuring mental health in terms of psychological distress and emotional well-being on a six point scale measuring the intensity/frequency of clients' emotional feelings over the previous four weeks. It includes one or more items from each of the four major mental health dimensions (anxiety, depression, loss of behavioural or emotional control, and psychological well-being) confirmed in factor analytic studies of the full length 38 item MHI from which the MHI-5 was derived.

When scoring the MHI-5 in the present study items were first coded on a 1 to 6 scale, 1 = None of the time and 6 = All of the time. All items are then re-coded so that a high score indicated better mental health. Therefore, a subject feeling blue – All of the time = has their original score recoded from a 6 to a 1, but a subject feeling happy and calm - All of the time = keeps his/her originally given score of 6. Therefore items 1, 2 and 4 had to be recoded. After the items were recoding, the score on each item was summed to form the raw score for the scale. The raw score of the MHI-5 scale was then transformed to a scale of 0-100 using the formula outlined below taken from the SF-36 Health Survey Manual (Ware et al., 1993), given that the lowest possible score = 5, the highest possible score = 30 and the possible range = 25.

SF-36 Transformed scale = SF transforming = $(x-5)4$

This transformation converts the lowest and highest possible scores to zero and a hundred respectively. Scores between these values represent the percentage of the total possible score achieved. As the mental health rating was not made during stage 1, the 'Well-being' study, to obtain a normative score to use in stages 2-4, the norm used, against which to match the transformed scores, was taken from a study of the general public in the United Kingdom (Mean=74.07, s.d.=17.07, N=8204) by Jenkinson et al. (1997).

Work functioning

This scale asked: My problem(s) interfere (s)...

1. *with my ability to perform routine tasks at work.*
2. *with my interaction with other people at work.*
3. *with my ability to concentrate/complete tasks at work.*
4. *with my performance at work.*
5. *with the development or management of my job.*

For each item on the five item work functioning scale clients were asked to indicate on a five point scale (1 = Not at all, 2 = A little bit, 3 = Moderately, 4 = Quite a lot and 5 = Extremely) how much their emotional or psychological problems interfered with different aspects of their work functioning (i.e., ability to perform routine tasks at work, interactions with other people at work, ability to concentrate or complete tasks at work, performance at work, and developing and managing their job). In the present study, clients were asked to state both their work and personal problems and therefore the instructions were slightly modified by asking clients to rate how much their problems, instead of their emotional or psychological problems, interfered with their work functioning. Each item of the scale was scored and the mean score for the scale was calculated, the higher the mean score the worse the work functioning.

As the work functioning scale was not used during stage 1, the 'Well-being' study, to get a normative scores to use in stages 2-4, the norm used was taken from a similar study in the United Kingdom (mean= 1.94, s.d.=0.84, N=808) by Worrall,1999).

Personal functioning

This scale asked: My problem(s) interfere (s)...

1. *with my personal relationships.*
2. *with my home life.*

This was designed to compliment the work functioning scale and was a self-reporting scale that consisted of two items assessing how client's problems interfered with their home life and personal relationships. The personal functioning scale used the same scale as the work functioning scale, for each item clients were asked to indicate on a five point scale (1 = Not at all, 2 = A little bit, 3 = Moderately, 4 = Quite a lot and 5 = Extremely) the extent to which their problems interfered with their personal functioning. Again, each item of the scale was scored and the mean score for the scale was calculated, the higher the mean score the worse the personal functioning.

As the personal functioning scale was not used during stage 1, the 'Well-being' study, to get a normative scores to use in stages 2-4, the norm used was taken from a similar study in the United Kingdom (mean= 2.23, s.d.=0.99, N=810) by Worrall,1999).

Table 8.2 Mental health, work and personal functioning measures x gender - pre/post/follow-up sample

Gender	Mental Health (Pre) Mean N (SDs)	Mental Health (Post) Mean N (SDs)	Mental Health (Follow) Mean N (SDs)	Work Fn (Pre) Mean N (SDs)	Work Fn (Post) Mean N (SDs)	Work Fn (Follow) Mean N (SDs)	Person. Fn (Pre) Mean N (SDs)	Person. Fn (Post) Mean N (SDs)	Person. Fn (Follow) Mean N (SDs)
Male	38.03 61 20.78	60.89 36 21.70	55.00 16 22.22	3.03 62 1.06	2.30 34 1.09	2.96 15 1.25	3.18 62 1.20	2.37 35 1.09	2.53 15 1.22
Female	36.98 175 16.94	50.96 116 20.74	61.75 48 16.87	2.77 173 1.08	2.25 113 .93	2.22 47 1.06	3.36 174 1.08	2.70 115 1.25	2.51 47 1.12
Missing		52.00 5 20.98	57.60 5 15.39		2.04 5 .75	1.93 6 .84		2.20 5 1.30	3.00 6 1.30
Total	37.25 236 17.97	53.27 157 21.24	59.88 69 18.11	2.84 235 1.08	2.26 152 .96	2.36 68 1.12	3.31 236 1.11	2.61 155 1.22	2.56 68 1.15

8.3 Mental health

Table 8.3.1 Showing where there was significant change between stages for the various groups examined. (✓ = $p < .001$; * = $p < .01$; + = $p < .05$; - = no significant difference) (norm = obtained from other studies; stage 2 = pre-treatment; stage 3 = post-treatment and stage 4 = follow-up).

Variable	Comp. with	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Mental health	Norm	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		3	✓	=✓	✓	✓	✓	=✓	✓	✓	✓	✓	✓
		4	✓	*	✓	-	✓	*	✓	✓	-	*	✓
	Stage 2	3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		4	✓	*	✓	=✓	=✓	+	✓	✓	✓	+	✓
	Stage 3	4	=✓	-	✓	+	+	-	*	-	+	-	+

Table 8.3.2: Mean effect sizes for change between pre- and post-treatment (stages 2 and 3) (PP Es) and between pre-treatment and follow-up (PF Es) (stages 2 and 4) – all groups of interest. (%Imp. = percentage of subjects improving; N.Prof. = Non-professional)

Variable	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Mental health	PP Es	.89	1.05	.85	1.15	.83	1.08	.75	.87	.95	1.10	.80
	%Imp.	78.2	79.3	77.9	68.0	80.6	80.6	80.5	77.9	78.9	76.2	78.4
	N	133	29	104	25	108	26	82	95	38	21	74
	PF Es	1.36	1.19	1.41	2.14	1.24	1.26	1.23	1.25	1.80	1.34	1.22
	%Imp.	84.3	66.7	84.6	100	81.8	72.7	81.8	82.9	80.0	80.0	83.9
	N	51	12	39	7	45	11	33	41	10	10	31

Table 8.3.3 Percentage changed (clinically significant and reliable change) for mental health

Change		CS and RC		C.S. only		RC only		No change		Deteriorated		
Variable		Group	No	%	No	%	No	%	No	%	No	%
Mental health	Post-treatment	All	31	26.7	7	6.0	18	15.5	57	49.1	3	2.6
		Male	8	34.8	2	8.7	4	17.4	9	39.1	0	0
		Female	23	39.0	5	8.5	14	23.7	14	23.7	3	5.1
	Follow-up	All	23	50.0	3	6.5	7	15.2	13	28.3	0	0
		Male	4	40.0	0	0	3	30.0	3	30.0	0	0
		Female	19	52.8	3	8.3	4	11.1	10	27.8	0	0

(percentage in bold; see table 7.3.3 for detail explanation concerning column data above)

Post- treatment results

N.B: for all subjects (133 -29 males and 104 females) who had pre-treatment scores for mental health; 16 (15.0% - 24.1% of the males and 12.5% of the females) came to the counselling with mental health levels that were not significantly different from the norm.

Follow-up results

N.B: for all subjects who had pre-treatment scores for mental health 4 (8.0% of total at the follow-up stage – 9.1% of the males and 7.7% of the females) came to the counselling with mental health levels that were not significantly different from the norm.

8.3.1 Mental health – all subjects

From table 8.2 it can be seen that the mental health levels rose through all the stages 2-4 of the study for all the subjects together. From table 8.3.1 the initial mean for mental health for all the subjects coming for counselling was significantly lower than that obtained for the norm from other studies of subjects in the UK. This mean rose immediately after therapy and had risen again by the follow-up stage, though both means at stage 3 and stage 4 (post-treatment and follow-up) were still significantly different from the norm. The means for the post-treatment and follow-up were significantly different from the pre-treatment mean. The difference between post-treatment and follow-up was also significant.

Table 8.3.2 shows the mean effect sizes for measuring the strength of the change between the pre- and post means and pre- and follow-up means for all subjects and the percentage who have improved. From this can be seen that for 78.2% of all subjects there was a positive effect size by stage 3. The mean effect size changed at follow-up from .89 to 1.36 and the percentage improving rose to 84.3%.

Thus for all the subjects there was a consistent improvement in mental health levels between pre- and post-treatment, and this improvement continued to the follow-up stage. But while the results showed changes/improvements for all subjects at both stages 3 and 4, the mean levels at each stage for the subjects as a whole remained significantly lower than the norm.

For the age groupings, the 16-35 year olds seem to benefit from the counselling in that by stage 4 their mean was no longer significantly different from the norm. There were also significant changes between stages 2 (pre-treatment) and 3, 2 and 4 (follow-up) and between stages 3 and 4.

The 36-64+ year olds produced significant change as a result of the counselling and were able to improve on that change by the follow-up stage. But the mean levels at post-treatment and follow-up were not reduced to the point where they were no longer significantly different from the norm, though the effect size stage 3 was .83 and this improved for this group to 1.24 at stage 4 and for each of those stages the percentages of those improving were 80.6% and 81.8% respectively (table 8.3.2).

Similarly the professionals improved their mental health levels significantly after stages 3 and 4 from their mean pre-treatment level, though there was no significant difference between the means at stage 3 and 4. But the means at stages 3 and 4 remained significantly different from the norm. The mean effect size for the change for the professional group was, at stage 3, .87 (with 77.9% improving) and by stage 4, this was 1.25 with 82.9% improving. For the non-professionals, the mean at stage 4 (follow-up) was no longer significantly different from the norm, placing them within the normal functioning group when prior to treatment, as a group, they were within the non-functioning group for mental health. The mean effect size for the non-professionals, after stage 3, was .95 (with 78.9% improving) and by stage 4 this mean effect size had risen to 1.80 with 80.0% of those producing follow-up responses having improved. But at this stage there were only 10 responders in this group.

8.3.2 Mental health – gender

From table 8.2 it can be seen that the mental health measure for the males rose from stage 2 to stage 3 but dropped a little again at stage 4 but not to the pre-treatment level so for the males there had been some improvement after counselling. This is in contrast with the females whose mental health mean increased from their pre-treatment level but not as high as the males at stage 3, but by stage 4, the females had continued to improve to a level slightly higher than the males at any stage. However, as can be seen from table 8.3.1 while the changes between stage 2 and 3 and between 2 and 4 for both genders was significant, and for the females the same applied also between stages 3 and 4, at no stage, for either of the genders, did their mental health rise to a level where it was no longer significantly different from that of the norm population.

Table 8.3.2 shows the effect sizes for the magnitude of the change between the pre- and post means and pre- and follow-up means for the genders and the proportion who improved. From this can be seen that 79.3% of the males improved and that there was a

mean positive effect size of 1.05 by stage 3, rising to 1.19 by stage 4 (66.7% having improved at this stage). This was in contrast with other results in that this showed the males improving on their mean effect size between stages 3 and 4. For the females at stage 3 - 77.9% had improved and the mean effect size was .85, by stage 4 the proportion who had improved was 84.6% and the mean effect size had risen to 1.41.

Table 8.3.3 gives the percentage of subjects who produced clinically significant and reliable change. The trends shown on an individual level were different from the findings at the group level as this proportion indicated those who produced significant change. Here the proportion of the males who produced clinically significant and reliable change was lower than the females at stage 3 of the study i.e. at the post treatment stage and by the follow-up stage the percentage of males achieving this, while higher than the post-treatment stage, it was still lower than that of females achieving this at stage 4 (40.0% compared with 52.8%). Thus the increase in those achieving clinically significant and reliable change by stage 4 (26.4% at stage 3 to 50.0% at stage 4 for all the subjects who were in the dysfunctional group at stage 2) seems to be attributable to the improvements mostly among the females by this stage. Further, only 5.1% of the females deteriorated by stage 3 and no males did so at this stage, by stage 4 no subjects had deteriorated in their mental health.

From table 8.3.1 concerning the sub-groups of males and females in the age group 36-64+ and in the professional group, it is seen that these groups of males and females followed a similar pattern of responses as with the genders as a whole. This applied to the significances of the changes and the relative mean effect sizes. But the one difference in the overall trend within these results was seen for the male professionals who produced a mean effect size greater than the professional females by stage 4. (For above significance details - see appendix A18.5-8 and C8.1).

Thus in summary, the counselling treatment was very effective in producing significant change and very good mean effect sizes for that change at the post-treatment and follow-up stages of the study for a very high proportion (at least over 66.7%) of the subjects as a whole and in most subgroups. But in most groups the 'Mental health' levels were not increased to a level where it was no longer significantly different from the norm, the exceptions were the non-professionals and 16-35 year olds. At the pre-treatment stage there was no significant difference between the genders in their 'Mental health' mean scores. At the post-treatment stage the males had significantly better 'Mental health' than

the females, as did the 16-35 year olds as a whole, and the females of this age group, when compared with the 36-64+ year olds, as evidenced by the significantly higher mean effect size of the younger group as compared with the older group. The non-professionals had significantly higher 'Mental health' mean scores by the follow-up stage than the professionals.

8.3.3 Mental health – summary

Thus from tables 8.2 and 8.3.1, 2 and 3 all groups arrived with mental health levels that were significantly higher than that of the norm. Those who benefited most from the counselling by improving their mental health immediately after treatment (stage 3) were the males (as a group and as individuals) as shown particularly by their higher mean effect sizes for the change and the proportion who achieved clinically significant and reliable change, as compared with the females. The mean effect sizes for all groups were relatively high and the proportions achieving change were high. The non-professional and 16-35 year old groups were the only ones to have increased their mean mental health level such that by stage 4 it was no longer significantly lower than the norm. The professional males for this measure showed a different trend as compared with other results in that they showed an improved mean effect size at stage 4 and this was unusually higher than that of the females at this stage. But at both stages 3 and 4 the proportion of males achieving clinically significant and reliable change was less than that of the females. However, the number of males producing these results at stage 4 was relatively low so perhaps little can be implied from these results. Further, the levels of deteriorating as a result of the counselling at all stages was very low and only the females showed this at stage 3 of the study. Overall it was clear that the subjects came to the counselling with mental health levels that were significantly lower than the norm and while the counselling produced significant change, only the non-professionals and the age group 16-35 were able to increase their mental health such that it was no longer significantly lower than the norm.

8.4 Work functioning

Table 8.4.1 Showing where there was significant change between stages for the various groups examined. (✓ = $p < .001$; * = $p < .01$; + = $p < .05$; - = no significant difference) (stage 1 = baseline measure; stage 2 = pre-treatment; stage 3 = post-treatment and stage 4 = follow-up).

Variable	Comp. with	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Work functioning	Norm	2	✓	✓	✓	✓	✓	✓	✓	✓	*	✓	✓
		3	✓	-	=✓	-	=✓	-	*	✓	-	+	*
		4	+	+	-	-	*	+	-	✓	-	+	+
	Stage 2	3	✓	✓	✓	=✓	✓	=✓	✓	✓	-	=✓	✓
		4	✓	-	=✓	-	*	-	*	+	*	-	+
	Stage 3	4	-	-	-	-	-	-	-	-	+	-	-

Table 8.4.2 Mean effect sizes for change between pre- and post-treatment (stages 2 and 3) (PP Es) and between pre-treatment and follow-up (PF Es) (stages 2 and 4) – all groups of interest. (%Imp. = percentage of subjects improving; N.Prof. = Non-professional)

Variable	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Work functioning	PP Es	.67	.71	.67	1.07	.58	.64	.56	.77	.41	.85	.74
	%Imp.	65.6	65.6	67.0	76.0	63.0	56.0	65.3	67.4	60.6	57.1	70.4
	N	125	28	97	25	100	25	75	92	33	21	71
	PF Es	.43	.18	.51	.20	.46	.15	.58	.40	.56	.38	.40
	%Imp.	53.1	53.1	51.4	57.1	52.4	54.5	51.6	52.5	55.6	60.0	50.0
	N	49	12	37	7	42	11	31	40	9	10	30

Table 8.4.3 Percentage changed (clinically significant and reliable change) for work functioning.

Change			CS and RC		C.S. only		RC only		No change		Deteriorated	
Variable	Group		No	%	No	%	No	%	No	%	No	%
Work functioning	Post-treatment	All	20	20.2	12	12.1	22	22.2	43	43.4	2	2.0
		Male	3	13.6	3	13.6	5	22.7	11	50.0	0	0
		Female	17	22.1	9	11.7	17	22.1	32	41.6	2	2.6
	Follow-up	All	9	19.6	3	6.5	7	15.2	21	45.7	6	13.0
		Male	2	20.0	0	0	2	20.0	5	50.0	1	10.0
		Female	7	19.4	3	8.3	5	13.9	16	44.4	5	13.9

(percentage in bold; see table 7.3.3 for detail explanation concerning column data above)

Post- treatment results

N.B: for all subjects (125 -28 males and 97 females) who had pre-treatment scores for work functioning; 28 (22.4% - 21.4% of the males and 22.7% of the females) came to the counselling with work functioning levels that were not significantly different from the norm.

Follow-up results

N.B: for all subjects who had pre-treatment scores for work functioning 7 (14.9% of total at the follow-up stage – 18.1% of the males and 13.9% of the females) came to the counselling with work functioning levels that were not significantly different from the norm.

8.4.1 Work functioning – all subjects

From table 8.2 it can be seen that the work functioning improved (meaning dropped) to stages 3 of the study for all the subjects together, but rose again at stage 4. From table 8.4.1 the initial mean for work functioning for all the subjects coming for counselling was significantly higher than that obtained for the norm from other studies of subjects in the UK. This mean dropped immediately after therapy but rose again by the follow-up stage, though both means at stage 3 and stage 4 (post-treatment and follow-up) were still significantly different from the norm. The means for the post-treatment and follow-up were significantly different from the pre-treatment mean. The difference between post-treatment and follow-up was not significant.

Table 8.4.2 shows the mean effect sizes for measuring the strength of the change between the pre- and post means and pre- and follow-up means for all subjects and the percentage who have improved. From this can be seen that for 65.6% of all subjects there was a positive effect size by stage 3. The mean effect size unfortunately dropped at follow-up from .67 to .43 and the percentage improving dropped from 65.6% to 53.1%.

Thus for all the subjects there was an improvement in work functioning between pre- and post-treatment, but this improvement lessened by the follow-up stage. But while the results showed significant changes/improvements for all subjects at both stages 3 and 4, the mean levels at each stage for the subjects as a whole remained significantly higher than the norm.

For the age groupings, the 16-35 year olds seem to benefit from the counselling as by stage 3 the mean effect size for the change was 1.07 and by stage 4 the group mean was no longer significantly different from the norm. There were also significant changes between stages 2 (pre-treatment) and 3, 2 and 4 (follow-up) for this group.

The 36-64+ year olds produced significant change as a result of the counselling and were able to improve on that change by the follow-up stage. But the mean levels at post-treatment and follow-up were not reduced to the point where they were no longer significantly different from the norm, though the effect size stage 3 was .58 but this dropped to lower than average to .46 at stage 4 and those showing improvement for this group dropped from 63.0% at stage 3 to 52.4% at stage 4 (table 8.4.2).

Similarly the professionals improved their work functioning significantly after stages 3 and 4 from their mean pre-treatment level. But the means at stages 3 and 4 remained significantly different from the norm. The mean effect size for the change for the professional group was .77 at stage 3 (with 67.4% improving) but by stage 4, this dropped to .40 with 52.5% improving. For the non-professionals, the means at stages 3 and 4 were no longer significantly different from the norm, placing them within the normal functioning group when prior to treatment, as a group, they were within the non-functioning group for this variable. The mean effect size for the non-professionals, after stage 3, was .41 (with 60.6% improving) and by stage 4 this mean effect size had risen to above average of .56, with 55.6% of those producing follow-up responses having improved. But at this stage there were only 13 responders in this group.

8.4.2 Work functioning – gender

From table 8.2 it can be seen that the work functioning measure for the males dropped (improved) from stage 2 to stage 3 but rose again at stage 4 but not quite to the pre-treatment level. This is in contrast with the females whose mean work functioning dropped (improved) from their pre-treatment level at stage 3 and continued to improve to stage 4. From table 8.4.1 the gender differences can be clearly seen. For the males the level of work functioning was not significantly different from the norm at stage 3 but by stage 4 the mean had become significantly higher than the norm again thus only the change between stage 2 and 3 was significant but not between stage 2 and 4. The females responded differently in that by stage 4 the mean for work functioning was no longer significantly different from the norm and the differences between stage 2 and 3 and between stage 2 and 4 were significant.

Table 8.4.2 shows the effect sizes for the magnitude of the change between the pre- and post means and pre- and follow-up means for the genders and the proportion who improved. From this can be seen that 65.6% of the males improved and that there was a mean positive effect size of .71 by stage 3, but this dropped to .18 by stage 4 (showing

only 53.1% improving by this stage). For the females at stage 3 – 67.0% had improved and the mean effect size was .67, by stage 4 the proportion who had improved was 51.4% and the mean effect size had dropped to .51, but was still just above average.

Table 8.4.3 gives the percentage of subjects who produced clinically significant and reliable change. The trends shown on an individual level were different from the findings at the group level as this proportion indicated those who produced significant change. Here the proportion of the males who produced clinically significant and reliable change was lower than the females at stage 3 of the study i.e. at the post treatment stage; but by the follow-up stage the percentage of males achieving this was slightly higher than that of the females achieving this at stage 4 (20.0% compared with 19.4%). This was also reflected in the proportions of each gender who achieved reliable change too (20.0% and 13.9% respectively) and also the proportion of each gender that deteriorated (10.0% and 13.9%). It should also be noted that just over a fifth of the subjects (22.4%) came with levels for work functioning that was not significantly different from the norm.

From table 8.4.1 concerning the sub-groups of males and females in the age group 36-64+ and in the professional group, it is seen that these groups of males and females followed a similar pattern of responses as with the genders as a whole. For this variable the overall trend within these results was that both genders separately and in their respective groups produced good effect sizes for the change at stage 3, with the males producing higher effect sizes in all groups than the females. But only the female 36-64+ year olds were able to maintain a good above average effect size for the change by stage 4. (For above significance details - see appendix A18.5-8 and C8.2)

8.4.3 Work functioning – summary

Thus from tables 8.2 and 8.4.1, 2 and 3 all groups arrived with work functioning levels that were significantly higher than that of the norm. Those who benefited most from the counselling by improving their work functioning immediately after treatment (stage 3) were the males as a group as shown particularly by their higher mean effect sizes for the change, but the proportion producing clinically significant and reliable change was at this stage lower than the females. The mean effect sizes for all groups were relatively high and the proportions achieving change were high. The non-professional group was able to show a good effect size for the change at the follow-up stage and the 36-64+ year old females were the only group to maintain an above average effect size for the change for work functioning at both stages 3 and 4. By stage 3 the proportion of males achieving clinically

significant and reliable change was less than the females but by stage 4 there was little difference in the relative proportions of subjects in each gender group who produced clinically significant and reliable change as individuals (though by this stage there were only 2 males) so perhaps little can be implied from these results. Overall it was clear that the subjects came to the counselling with work functioning levels that were significantly poorer than the norm and while the counselling produced significant change, only the females were able to improve on their levels and by stage 4 their levels were no longer significantly higher than the norm whereas the males while producing good significant change at the post-treatment stage they were not able to maintain this by the follow-up stage.

8.5 Personal functioning

Table 8.5.1 Showing where there was significant change between stages for the various groups examined. (✓ = $p<.001$; * = $p<.01$; + = $p<.05$; - = no significant difference) (stage 1 = baseline measure; stage 2 = pre-treatment; stage 3 = post-treatment and stage 4 = follow-up).

Variable	Comp. with	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Personal functioning	Norm	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		3	✓	-	✓	-	✓	-	✓	=✓	-	-	*
		4	+	-	-	-	-	-	-	+	+ #	-	+
	Stage 2	3	*	✓	✓	✓	✓	✓	✓	✓	=✓	=✓	✓
		4	-	-	✓	-	✓	-	✓	✓	✓	+	=✓
	Stage 3	4	-	-	-	-	-	-	-	-	*	-	-

(# = lower than norm)

Table 8.5.2 Mean effect sizes for change between pre- and post-treatment (stages 2 and 3) (PP Es) and between pre-treatment and follow-up (PF Es) (stages 2 and 4) – all groups of interest (%Imp. = percentage of subjects improving; N.Prof. = Non-professional)

Variable	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Personal functioning	PP Es	.79	.63	.84	.99	.74	.65	.77	.82	.71	.72	.85
	%Imp.	65.1	57.1	67.3	68.0	64.4	60.0	65.8	68.4	55.9	66.7	68.9
	N	129	28	101	25	104	25	79	95	34	21	74
	PF Es	.78	.57	.85	.79	.78	.51	.87	.64	1.31	.35	.74
	%Imp.	58.0	58.3	67.9	71.4	55.8	54.5	56.2	52.5	80.0	50.0	53.3
	N	50	12	38	7	43	11	1.42	40	10	10	30

Table 8.5.3 Percentage changed (clinically significant and reliable change) for personal functioning

Change			CS and RC		C.S. only		RC only		No change		Deteriorated	
Variable		Group	No	%	No	%	No	%	No	%	No	%
Personal functioning	Post-treatment	All	41	40.2	0	0	27	26.5	30	29.4	4	3.9
		Male	7	41.2	0	0	4	23.5	6	35.3	0	0
		Female	34	40.0	0	0	23	27.1	24	28.2	4	4.7
	Follow-up	All	14	40.0	0	0	9	25.7	10	28.6	2	5.7
		Male	3	37.5	0	0	2	25.0	3	37.5	0	0
		Female	11	40.7	0	0	7	25.9	7	25.9	2	7.4

(percentage in bold; see table 7.3.3 for detail explanation concerning column data above)

Post- treatment results

N.B: for all subjects (129 -28 males and101 females) who had pre-treatment scores for personal functioning: 31 (24.0% - 39.3% of the males and 19.8% of the females) came to the counselling with personal functioning levels that were not significantly different from the norm.

Follow-up results

N.B: for all subjects who had pre-treatment scores for personal functioning 17(34.0% of total at the follow-up stage – 33.3% of the males and 34.2% of the females) came to the counselling with personal functioning levels that were not significantly different from the norm.

8.5.1 Personal functioning – all subjects

From table 8.2 it can be seen that the personal functioning improved (dropped) to stages 3 and 4 of the study for all the subjects together. From table 8.5.1 the initial mean for personal functioning for all the subjects coming for counselling was significantly higher than that obtained for the norm from other studies of subjects in the UK. This mean dropped immediately after therapy and continued to do so by the follow-up stage, though both means at stage 3 and stage 4 (post-treatment and follow-up) were still significantly different from the norm. The means for the post-treatment and follow-up were significantly different from the pre-treatment mean. The difference between post-treatment and follow-up was not significant.

Table 8.5.2 shows the mean effect sizes for measuring the strength of the change between the pre- and post means and pre- and follow-up means for all subjects and the percentage who have improved. From this can be seen that for 65.1% of all subjects there was a positive mean effect size by stage 3. The mean effect size dropped slightly at follow-up from .79 to .78 and the percentage improving dropped to 58.0%.

Thus for all the subjects there was an improvement in personal functioning between pre- and post-treatment, and unlike the work functioning variable, this variable continued to improve through to the follow-up stage. But while the results showed significant changes/improvements for all subjects at both stages 3 and 4, the mean levels at each stage for the subjects as a whole remained significantly lower than the norm.

For the age groupings, the 16-35 year olds seem to benefit from the counselling as by stage 3 the mean effect size for the change was .99 and by this stage the mean was no longer significantly different from the norm. There was a significant change for this group between stage 2 and 3 but by stage 4 the difference was no longer significant as for this group the mean personal functioning rose again by the follow-up stage.

The 36-64+ year olds produced significant change as a result of the counselling and were able to improve on that change by the follow-up stage. But the mean level at post-treatment was not reduced to the point where it was no longer significantly different from the norm, though the effect size stage 3 was .74. By stage 4 this group's level of personal functioning was no longer significantly higher than the norm and the change between stage 2 and 4 was again significant, producing an increase in the mean effect size to .78 with the percentage improving dropping to 55.8% (table 8.4.2).

Similarly the professionals improved their personal functioning significantly after stages 3 and 4 from their mean pre-treatment level. But the means at stages 3 and 4 remained significantly different from the norm. The mean effect size for the change for the professional group was, at stage 3, .82 (with 68.4% improving) but by stage 4, this dropped to .64 (though still above average) with 52.5% improving. For the non-professionals, the mean at stage 3 was no longer significantly different from the norm, placing them within the normal functioning group when prior to treatment, as a group, they were within the non-functioning group for this variable. The mean effect size for the non-professionals, after stage 3, was .71 (with 55.9% improving). However, by stage 4 this group's mean level for personal functioning was again significantly different from the norm but for this group the reason was that not only was the change significant between stage 2 and stages 3 and 4, but also the change between stages 3 and 4 was also significant, in fact the change was such that the level for personal functioning for this group had dropped to where it was now significantly lower than the norm. Thus the mean effect size by stage 4 had improved to 1.31 with 80.0% improving, but at this stage there were only 10 responders in this group.

8.5.2 Personal functioning – gender

From table 8.2 it can be seen that the personal functioning measure for the males dropped (improved) from stage 2 to stage 3 but rose again at stage 4 but not to the pre-treatment level. This is in contrast with the females whose mean personal functioning dropped (improved) from their pre-treatment level at stage 3 and continued to improve to stage 4. However, from table 8.5.1 the gender differences were not as great as with, for example, work functioning, as here the males' mean level dropped by stage 3 such that it was no longer significantly higher than the norm and though the level increased again by stage 4 it was still not significantly higher than the norm. The females on the other hand though improving by stage 3 and like the males producing significant change, their level for personal functioning did not reach a point where it was no longer significantly higher than the norm until stage 4. For both the genders the changes between stages 2 and 3 and 4 were all significant.

Table 8.4.2 shows the effect sizes for the magnitude of the change between the pre- and post means and pre- and follow-up means for the genders and the proportion who improved. From this can be seen that 57.1% of the males improved and that there was a mean positive effect size of .63 by stage 3, and this dropped to .57 (but still above average) by stage 4 with 58.3% improving. For the females at stage 3 – 67.3% had improved and the mean effect size was .84, by stage 4 the proportion who had improved increased to 67.9% and the mean effect size had risen to .85, a well above average mean effect size. This pattern was shown for most of the sub-groups for the genders, where the males' level dropped by stage 4 but for the most part still reduced their levels such that their mean was no-longer significantly higher than the norm by stage 3 and remained so by stage 4 and their mean effect size for the change remained above average. The exception was for the professional males where the mean effect size dropped to .35 at the follow-up stage. For the female sub-groups the 36-64+ group (as with the group as a whole) improved on their mean effect size by the follow-up stage, while the professional females' mean effect size dropped by stage 4 this was still well above average at .74.

Table 8.4.3 gives the percentage of subjects who produced clinically significant and reliable change. The trends shown on an individual level were not so different from the findings at the group level. Here the proportion of the males who produced clinically significant and reliable change was fairly equivalent to the proportion of females producing this at stage 3 of the study i.e. at the post treatment stage; but by the follow-up stage the percentage of males achieving this was somewhat lower than the proportion of females

achieving this at stage 4 (37.5% compared with 40.7% respectively). The proportion of each gender who achieved reliable change was also slightly different at stage 3 where 23.5% of the males produced this as compared with 27.1% of the females and this difference almost disappeared at stage 4 (25.0% for the males and 25.9% for the females). At the post-treatment stage none of the males had deteriorated but 4.7% of the females had. By stage 4 still no males had deteriorated but the proportion of females had risen slightly to 7.4%. It should also be noted that nearly a quarter of the subjects (24% - two-fifths of the males {39.3%} and one fifth of the females {19.8%}) came with levels for personal functioning that were not significantly different from the norm (for above details - see appendix A18.5-15 and C8.3).

8.5.3 Personal functioning – summary

Thus from tables 8.2 and 8.5.1, 2 and 3 all groups arrived with personal functioning levels that were significantly higher than that of the norm. Those who benefited most from the counselling by improving their personal functioning immediately after treatment (stage 3) were the males as a group and within the sub-groups, the 36-64+ years of age group and the professional males. But all groups were able to improve their personal functioning by the follow-up stage such that the levels were no longer significantly higher than the norm and nearly all groups (other than the professional males) were able to produce above average mean effect sizes for the change at both stages 3 and 4. Further, the change for most groups at both stages was significant except for the 16-35 year olds and the 36-64+ year old males. By stage 3 the proportion of males achieving clinically significant and reliable change was fairly similar to that for the females but by stage 4 this proportion was reduced a little as compared with the females. Overall it would seem that for this group of subjects the counselling produced high mean effect sizes for the change for this variable and both genders benefited and were able to reduce their mean levels to that of the norm, the males immediate after counselling and the females by the follow-up stage and most groups produced high mean effect sizes for that change at both stages of the study. It should also be noted that the non-professionals were able to benefit from the counselling so much so that they were able to obtain a mean response for this variable by the follow-up stage that was significantly lower (better) than the norm.

8.6 Chapter summary

All groups of subjects in the counselling sample came with levels that were significantly different from the norms for each of the factors examined in this chapter, namely mental health, work and personal functioning. As a result of the counselling the general findings

underline those found in the previous chapter on stress factors in that there were clear differences in the way the genders responded to the therapy. For mental health immediately after treatment the males achieved a mean high effect size for the change and the proportion who achieved clinically significant and reliable change was high though slightly lower than the females. But in contrast with many of the other findings this proportion had increased by stage 4 though was still lower than the females. However, the professional males differed in that by stage 4 they showed an improved mean effect size and this was unusually higher than for the equivalent group of females. The results for work and personal functioning indicated that all groups produced high effect sizes and the proportions of each gender which showed clinically significant and reliable change at stage 4 were fairly similar for both measures. It also should be added that it seemed from the correlation calculations (see appendix A20) that poor work or personal functioning affected mental health or visa versa.

Overall, the subjects came with mental health levels which were significantly higher than the norm and while the counselling produced significant change only the non-professionals and the 16-35 year olds (all mainly females) were able to increase their mental health such that it was no-longer significantly lower than the norm. This applied also to the females all together by stage 4 for work functioning. With respect to personal functioning, all groups, both male and female, were able to do this by the follow-up stage and all groups other than the professional males were able to produce above average effect sizes for the change at both stages 3 and 4. The non-professionals changed their responses to personal functioning as a result of the counselling to a mean level that was then significantly lower (better) than the norm so had benefited considerably from the counselling process.

9. Results from stages 2-4: Analysis of the counselling data on

Coping strategies

9.1 Introduction

The chapters 5 and 6 analysed the group data from the stages 1 and 2 of the study focussing on the groups of subjects that were of interest in this study and the difference between the proportions of each of the groups with respect to stage 1 (baseline well-being study) and stage 2 (client assessment/pre-treatment stage). Chapters 7 and 8 focused on the differences in responses and the changes that these groups made through the treatment of the brief therapy within the EAP service as offered to the organisation (Norfolk County Council) by the EAP provider via their counselling affiliates. Those chapters focused on the changes through stages 2 (pre-treatment); 3 (post-treatment) and 4 (six month follow-up) for the variables called 'work stress'; mental health; work and personal functioning. This chapter will focus on the changes through stages 2 (pre-treatment); 3 (post-treatment) and 4 (six month follow-up) for the variable called 'coping strategies'. The results were derived from the subjects' scores through the three stages 2-4 for the six coping strategies, namely: Rational actions; Palliative response; Social support; Depressive; Emotive and Passive responses.

The groups that will be the focus of this chapter and the structure for the presentation of the data will be similar to that presented in chapter 7 and thus was described in the introduction of that chapter.

This chapter will be set out firstly with a table presenting all the mean results for each of the coping strategies for the group as a whole and for each gender separately at each stage of the study. For the first three coping strategies (i.e. Rational actions; Palliative response and Social support) the higher the figure in the mean column the more that group of subjects were using the positive coping strategies. The higher means for the last three coping strategies indicates a greater use of the negative coping strategies of Depressive, Emotive and Passive responses. For the first three coping strategies if the brief therapy is helping the subjects then the mean should increase through the stage 2-4; for the last three coping strategies if the counselling is helping the subjects then the means for these coping strategies should drop through the three stages 2-4. Stage 1 'mean' was the mean for baseline sample group.

(For the full tables showing the three forms of measure mentioned above for the present variables, see appendix A18: tables A18.16-40 and appendixes C9.1-6).

9.2 Coping strategies.

Below, in table 9.2 is presented the means for each coping strategy at each of the stages of the study for all the subjects together and for each of the genders separately. Stage 1 mean is the baseline mean; stages 2-4 shows the change of means between each of the stages from pre-treatment to post-treatment and then to the follow-up stage. A high mean for the first three coping strategies the better use was being made of that strategy and if the counselling was helping these mean should increase; for the last three coping strategies the means should be reduced through the stages 2-4 if the counselling helped.

It may be also important as a brief reminder, to present again the meaning of the coping strategies being used here (for a full description see chapter 4: section 4.8):

Rational actions reflect a style that involved coping with stress by adopting a strategy of rational actions which may be considered a healthy process.

Item example for this strategy: *Pass work onto others as much as possible.*

The *palliative action* option may be less healthy since it does not involve a direct attempt to approach the source of the stress. An example of this kind of strategy is to take comfort in other things such as watching television, or using a displacement activity such as a hobby.

Item example for this strategy: *Try to forget it by working at my hobbies.*

Seeking *social support* is possibly a more healthy strategy and may include such actions as involving fellow workers in the problem or talking things over with a friend.

Item example for this strategy: *Talk things over with a friend.*

Depressive response is seen as an unhealthy response. In this case the problem becomes internalised or 'bottled up' and the individual develops a feeling of powerlessness or not feeling in control. This manifests itself by affective symptoms such as loss of sleep, becoming withdrawn and lethargy.

Item example for this factor: *Get depressed.*

Emotive response, i.e. expressing emotions under stress is seen as possibly healthy within limits. Certainly suppression of emotion may lead to psychological and physical ill-health but excessive emotional expression is also associated with physical illness, not to mention the effect that this might have on peers at work or family or spouses.

Item example for this strategy: *Complain to the people responsible.*

The *passive response* is an unhealthy strategy as the individual simply accepts the stressful situation and lets things happen without attempting any intervention.

Item example for this strategy: *Simply give in and wait for the inevitable.*

Table 9.2 Coping strategies

Subjects		All			Males			Females		
Coping strategy	Stage	Mean	N	sd	Mean	N	sd	Mean	N	sd
Rational actions	1	2.85	2258	.75	2.89	821	.72	2.82	1436	.76
	2	2.56	233	.71	2.71	62	.68	2.51	171	.72
	3	2.75	164	.70	2.80	36	.67	2.76	112	.72
	4	2.81	68	.59	2.83	16	.43	2.86	46	.64
Palliative response	1	2.82	2254	.82	2.66	821	.82	2.91	1432	.80
	2	2.73	234	.76	2.67	62	.69	2.75	172	.78
	3	2.87	155	.77	2.87	36	.58	2.87	113	.83
	4	2.73	68	.70	2.75	16	.42	2.75	46	.75
Social support	1	2.25	2257	.64	2.12	819	.64	2.33	1437	.64
	2	2.57	234	.67	2.29	62	.64	2.66	172	.65
	3	2.76	154	.64	2.81	36	.74	2.77	112	.62
	4	2.75	68	.64	2.73	16	.70	2.81	46	.59
Depressive response	1	2.61	2256	.91	2.51	822	.87	2.66	1433	.92
	2	3.29	234	.79	3.34	62	.79	3.28	172	.78
	3	2.98	154	.86	2.82	36	.90	3.03	112	.85
	4	2.74	68	.81	2.98	16	.93	2.65	46	.78
Emotive response	1	2.13	2247	.82	1.92	819	.71	2.26	1427	.86
	2	2.64	233	.81	2.19	62	.86	2.81	171	.78
	3	2.30	154	.74	2.13	36	.63	2.38	112	.76
	4	2.28	68	.87	2.23	16	.86	2.32	46	.87
Passive response	1	2.20	2252	.58	2.25	821	.59	2.17	1430	.57
	2	2.35	233	.64	2.57	62	.65	2.28	172	.62
	3	2.29	154	.59	2.40	36	.91	2.26	112	.59
	4	2.19	68	.63	2.47	16	.69	2.08	46	.57

9.3 Coping strategy - Rational action

Table 9.3.1 Showing where there was significant change between stages for the various groups examined. (✓ = $p < .001$; * = $p < .01$; + = $p < .05$; - = no significant difference) (stage 1 = baseline measure; stage 2 = pre-treatment; stage 3 = post-treatment and stage 4 = follow-up). (For details see A18: table A18.20 and C9.1: tables C9.1.1-54).

Coping strategy	Comp. with	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Rational action	Stage 1	2	✓	-	✓	✓	✓	-	✓	✓	✓	-	✓
		3	-	-	-	-	-	-	-	-	-	-	-
		4	-	-	-	-	-	-	-	-	-	-	-
	Stage 2	3	=✓	-	=✓	-	*	-	+	=✓	-	-	*
		4	✓	-	=✓	-	*	-	*	*	-	-	+
	Stage 3	4	-	-	-	-	-	-	-	-	-	-	-

Table 9.3.2 Mean effect sizes for change between pre- and post-treatment (stages 2 and 3) (PP Es) and between pre-treatment and follow-up (stages 2 and 4) (PF Es) – all groups of interest. (%Imp. = percentage of subjects improving; N.Prof. = Non-professional) (For details see A18: tables A18.16-19 and C9.1: tables C9.1.55-81).

Coping strategy	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Rational action	PP Es	.31	.12	.37	.25	.29	.10	.36	.27	.31	.16	.31
	%Imp.	58.3	51.7	60.2	68.0	55.9	50.0	57.9	57.8	50.5	57.1	58.0
	N	126	29	97	25	102	26	76	90	37	21	69
	PF Es	.44	.54	.40	.67	.40	.57	.34	.44	.42	.53	.41
	%Imp.	55.1	75.0	48.6	57.1	54.8	72.7	48.4	50.0	50.0	70.0	51.7
	N	49	12	37	7	42	11	31	10	10	10	29

Table 9.3.3 Percentage changed (Clinically significant and reliable change) for Coping strategy – ‘Rational actions’

Change			CS and RC		C.S. only		RC only		No change		Deteriorated	
Coping strategy		Group	No	%	No	%	No	%	No	%	No	%
Rational action	Post-Treatment	All	14	26.9	10	19.2	17	32.7	9	17.3	2	3.8
		Male	1	14.3	1	14.3	3	42.9	2	28.6	0	0
		Female	13	28.9	9	20.0	14	31.1	7	15.6	2	4.4
	Follow-up	All	4	18.2	8	36.4	6	27.3	4	18.2	0	0
		Male	1	25.0	2	50.0	1	25.0	0	0	0	0
		Female	3	16.7	6	33.3	5	27.8	4	22.2	0	0

(percentage in bold; see table 7.3.3 for detail explanation concerning column data above)

Post- treatment results:

N.B: for all subjects (127 -29 males and 98 females) who had pre-treatment scores for coping strategy 'Rational actions'; 77 (60.6% - 75.9% of the males and 56.1% of the females) came to the counselling with levels for 'Rational actions' which were not significantly different from the baseline norm.

Follow-up results:

N.B: for all subjects who had pre-treatment scores for 'Rational actions' 27 (55.1% of total at the follow-up stage – 66.7% of the males and 51.4% of the females) came to the counselling with levels for 'Rational actions' that were not significantly different from the baseline norm.

9.3.1: Rational actions – all subjects

From table 9.2 it can be seen that the mean scores for 'Rational actions' rose through all the stages 2-4 of the study for all the subjects together. From table 9.3.1 it can be seen that the initial mean for 'Rational actions' for all the subjects coming for counselling was significantly lower than that obtained for the baseline norm from stage 1 of the study. This mean rose immediately after therapy and had risen again by the follow-up stage, though the mean at stage 3 (post-treatment) was still significantly different from the baseline norm, however, by stage 4 this was no longer the case. The means for the post-treatment and follow-up were significantly different from the pre-treatment mean. The difference between post-treatment and follow-up was not significant.

Table 9.3.2 shows the mean effect sizes for measuring the strength of the change between the pre- and post means and pre- and follow-up means for all subjects and the percentage who have improved. From this can be seen that for 58.3% of all subjects there was a positive effect size by stage 3. The mean effect size changed at follow-up from .31 to .44 but the percentage improving dropped to 55.1%.

Thus for all the subjects there was a mean improvement in 'Rational actions' scores between pre- and post-treatment, and this improvement continued to the follow-up stage and the results showed that by stage 4 the change/improvement for all subjects together had put the mean within the functioning as opposed to the dysfunction population group.

For the age groupings, the 16-35 year olds seem to benefit from the counselling in that by stages 3 and 4 their mean was no longer significantly different from the norm. There were also significant changes between stages 2 (pre-treatment) and stage 3 but not between stage 2 and 4 (follow-up) and between stages 3 and 4. However, while the mean effect size for

the change at stage 3 for this group was low, by stage 4 it had reach an above average score of .67.

The 36-64+ year olds produced significant change as a result of the counselling and were able to improve on that change by the follow-up stage. The mean levels at post-treatment and follow-up were reduced to the point where they were no longer significantly different from the baseline norm, though the mean effect sizes at stages 3 and 4 were not high for this group.

Similarly the professionals improved their 'Rational action' coping strategy significantly after stages 3 and 4 from their mean pre-treatment level, though there was no significant difference between the means at stage 3 and 4. Further the means at stages 3 and 4 became such that they were no longer significantly different from the norm. The mean effect size for the change for the professional group was again low at both stage 3 and 4 with only 50% at stage 4 showing improvement. A similar pattern was produced with respect to the non-professionals, where the mean at stages 3 and 4 (follow-up) were no longer significantly different from the norm, placing them within the normal functioning group when prior to treatment, as a group, they were within the non-functioning group for 'Rational action' coping response. The mean effect size for the non-professionals, after stages 3 and 4 was, like the professional group, quite low with again only 50% showing improvement. But at this stage there were only 10 responders in this group.

9.3.2 Rational actions – gender

From table 9.2 it can be seen that the mean for 'Rational action' for the males rose from stage 2 to stage 3 and unlike other variables the mean continued to improve through to stage 4 but for the males the mean was never significantly different from the baseline norm at any stage of the study, and so the change between stages was not significant either. This is in contrast with the females whose mean score for 'Rational actions' increased from their pre-treatment level through both stages 3 and 4 and by stage 4, the females had improved to a level slightly higher than the males at this stage. Also the females started at a point that was significantly lower than the baseline norm and moved to means at stage 3 and 4 where the mean was no-longer significantly lower than the baseline norm. Further, for the females, the changes between stage 2 and stages 3 and 4 were significant. Also it was seen that at the pre-treatment stage the males came with a mean that was significantly higher than the females but by stages 3 and 4 the differences were no longer significant (see appendix C9.1: tables C9.1.13-14).

Table 9.3.2 shows the effect sizes for the magnitude of the change between the pre- and post means and pre- and follow-up means for the genders and the proportion who improved. From this can be seen that 51.7% of the males improved and that there was a very low mean effect size of .12 by stage 3, but this rose to higher than average mean effect size of .54 stage 4 (with 75.0% having improved at this stage). This was in contrast with other results in that this showed the males improving on their mean effect size between stages 3 and 4. For the females at stage 3 – 60.2% had improved and the mean effect size was .37, by stage 4 the proportion who had improved dropped to 48.6% though the mean effect size had risen slightly to .40.

Table 9.3.3 gives the percentage of subjects who produced clinically significant and reliable change. The trends shown on an individual level were different from the findings at the group level as this proportion indicated those who produced significant change. Here the proportion of the males who produced clinically significant and reliable change was very much lower than the females at stage 3 of the study i.e. at the post treatment stage (14.3% compared with 28.9%); but by the follow-up stage the percentage of males achieving this was much higher than the females (25.0% as compared with 16.7%). Further, 4.4% of the females deteriorated by stage 3, compared with none of the males, and by stage 4 no subjects had deteriorated in their score for 'Rational actions'. From table 9.3.1 concerning the sub-groups of males and females in the age group 36-64+ and in the professional group, it is seen that these groups of males and females followed a similar pattern of responses as with the genders as a whole. This applied to the significances of the changes and the relative mean effect sizes. However, only the males in the age group 35-64+ and in the professional group both produced above average effect size for the change by stage 4 as a result of the counselling for 'Rational actions' (.57 and .53 with 72.7% and 70.0% of the males showing improvement, respectively), (for above details - see appendix A18: tables A18.16-20 and appendix C9.1).

9.4 Coping strategy Palliative response

Table 9.4.1 Showing where there was significant change between stages for the various groups examined. (✓ = $p < .001$; * = $p < .01$; + = $p < .05$; - = no significant difference) (stage 1 = baseline measure; stage 2 = pre-treatment; stage 3 = post-treatment and stage 4 = follow-up). (For details see A18: table A18.27 and C9.2: tables C9.2.1-58).

Coping strategy	Comp. with	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Palliative response	Stage 1	2	-	-	-	-	*	-	+	-	+	-	-
		3	-	-	-	+	-	-	-	-	-	-	-
		4	-	-	-	-	-	-	-	-	-	-	-
	Stage 2	3	+	+	-	-	-	-	-	+	-	-	-
		4	-	-	-	-	-	-	-	-	-	-	-
	Stage 3	4	-	-	-	-	-	-	-	-	-	-	-

Table 9.4.2 Mean effect sizes for change between pre- and post-treatment (stages 2 and 3) (PP Es) and between pre-treatment and follow-up (stages 2 and 4) (PF Es) – all groups of interest. (%Imp. = percentage of subjects improving; N.Prof. = Non-professional) (For details see A18: tables A18.16-17; 24-25 and C9.2: tables C9.2.59-85).

Coping strategy	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Palliative response	PP Es	.12	.10	.12	.14	.11	.16	.10	.09	.18	.00	.12
	%Imp.	52.8	55.2	52.0	60.0	50.0	56.7	47.4	46.7	67.6	38.1	49.3
	N	127	29	98	25	102	26	76	90	37	21	69
	PF Es	.26	.37	.22	.24	.26	.31	.24	.29	.15	.39	.25
	%Imp.	51.0	66.7	45.9	42.9	50.0	63.6	45.2	53.8	40.0	70.0	48.3
	N	49	12	37	7	42	11	31	39	10	10	29

Table 9.4.3 Percentage changed (Clinically significant and reliable change) for Coping strategy – ‘Palliative’ response

Change		CS and RC		C.S. only		RC only		No change		Deteriorated		
Coping strategy		Group	No	%	No	%	No	%	No	%	No	%
Palliative response	Post-Treatment	All	9	21.4	5	11.9	16	38.1	9	21.4	3	7.1
		Male	1	12.5	1	12.5	4	33.3	2	16.7	0	0
		Female	8	23.5	4	11.8	12	35.3	7	20.6	3	8.8
	Follow-up	All	7	43.8	4	25.0	2	12.5	3	18.8	0	0
		Male	1	33.3	2	66.7	0	0	0	0	0	0
		Female	6	46.2	2	15.4	2	15.4	3	23.1	0	0

(percentage in bold; see table 7.3.3 for detail explanation concerning column data above)

Post- treatment results:

N.B: for all subjects (127 -29 males and 98 females) who had pre-treatment scores for coping strategy 'Palliative' response; 88 (69.3% - 72.4% of the males and 68.4% of the females) came to the counselling with levels for 'Palliative' response which were not significantly different from the baseline norm.

Follow-up results:

N.B: for all subjects who had pre-treatment scores for 'Palliative' response 33 (67.33% of total at the follow-up stage – 75.0% of the males and 64.9% of the females) came to the counselling with levels for 'Palliative' response that were not significantly different from the baseline norm.

9.4.1 Palliative response – all subjects

From table 9.2 it can be seen that the mean scores for 'Palliative' response rose to stage 3 but had dropped again to the pre-treatment level by stage 4, though from table 9.4.1 it can be seen that the initial mean for 'Palliative' response was not significantly different from the baseline mean at any stage of the study. The mean for the post-treatment though not that at follow-up, was significantly different from the pre-treatment mean. The difference between post-treatment and follow-up was just about significant for all the subjects together.

Table 9.4.2 shows the mean effect sizes for measuring the strength of the change between the pre- and post means and pre- and follow-up means for all subjects and the percentage who have improved. From this can be seen that for 52.8% of all subjects there was a positive effect size by stage 3. The mean effect size changed at follow-up from .12 to .26 and the percentage improving dropped to 51.0%.

Thus for all the subjects there was a mean improvement in 'Palliative' response scores between pre- and post-treatment, but this dropped to the pre-treatment level by stage 4, though the means at all stages were not significantly different from the baseline norm and the changes as measured by the effect sizes were not high.

For the age groupings, the 36-64 year olds came with a mean level for this coping strategy which was significantly different from the baseline mean but by stage 3 this difference was no longer significant and the change between stages 2 and 3 was also significant but not between stages 2 and 4. The age group 16-35 started with a mean at stage 2 that was not significantly different from the baseline norm.

The professionals group also came with mean levels for 'Palliative' response that was not significantly different from the baseline norm, and the effect sizes for the change for the

group at stages 3 and 4 were very low. The same applied to the non-professional group whose mean at the pre-treatment stage was significantly different from the baseline norm, but at stages 3 and 4 the means were not significantly different from that norm.

9.4.2 Palliative response – gender

From table 9.2 it can be seen that the mean for ‘Palliative’ response for the males rose from stage 2 to stage 3 and then dropped to stage 4, though at no time was the mean significantly higher than the baseline norm and while the change between stage 2 and 3 was significant this was not so between stage 2 and 4. This was fairly similar to that for the females as a whole where the mean level for ‘Palliative’ response was never significantly different from the baseline norm and the changes between each stage were also not significant.

Table 9.4.2 shows the effect sizes for the magnitude of the change between the pre- and post means and pre- and follow-up means for the genders and the proportion who improved. From this can be seen that 55.2% of the males improved and that there was a very low mean effect size of .10 by stage 3, but this rose to an effect size of .37 stage 4 (with 66.7% having improved at this stage). For the females, the pattern was fairly similar in that at stage 3 – 52.0% had improved and the mean effect size was .12, by stage 4 the proportion who had improved dropped to 45.9% though the mean effect size had risen slightly to .22.

Table 9.4.3 gives the percentage of subjects who produced clinically significant and reliable change. The trends shown on an individual level were different from the findings at the group level as this proportion indicated those who produced significant change. Here the proportion of the males who produced clinically significant and reliable change was very much lower than the females at stage 3 of the study i.e. at the post treatment stage (12.5% compared with 23.5%); but by the follow-up stage the percentage of males achieving this rose as did the proportion of females (33.3% and 46.2% respectively). Further, 8.8% of the females deteriorated by stage 3, compared with no males, but by stage 4, none of the subjects had deteriorated.

From table 9.4.1 concerning the sub-groups of males and females in the age group 36-64+ and in the professional group, it is seen that these groups of males and females followed a similar pattern of responses as with the genders as a whole. This applied to the significances of the changes and the relative mean effect sizes. There was also no

significant difference between the genders or any of the other groups compared with each other, other than of the 16-35 year olds who produced a significantly higher mean at stage 3 as compared with the 36-64+ year olds, but this difference disappeared by stage 4 of the study, (for above details - see appendix A18: tables A18.16-17 and 24-27 and appendix C9.2).

9.5 Coping strategy - Social support

Table 9.5.1 Showing where there was significant change between stages for the various groups examined (✓ = $p<.001$; * = $p<.01$; + = $p<.05$; - = no significant difference) (stage 1 = baseline measure; stage 2 = pre-treatment; stage 3 = post-treatment and stage 4 = follow-up). (For details see A18: table A18.30 and C9.3: tables C9.3.1-63).

Coping strategy	Comp. with	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Social support	Stage 1	2	✓	-	✓	=✓	✓	-	✓	✓	✓	-	✓
		3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		4	✓	+	✓	*	✓	+	✓	✓	-	-	✓
	Stage 2	3	✓	+	-	-	=✓	=✓	+	✓	-	=✓	-
		4	+	✓	-	+	-	-	-	+	-	-	-
	Stage 3	4	-	*	-	-	-	-	-	-	-	-	-

Table 9.5.2 Mean effect sizes for change between pre- and post-treatment (stages 2 and 3) (PP Es) and between pre-treatment and follow-up (stages 2 and 4) (PF Es) – all groups of interest. (%Imp. = percentage of subjects improving; N.Prof. = Non-professional) (For details see A18: tables A18.16-17; 28-29 and C9.3: tables C9.3.64-91).

Coping strategy	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Social support	PP Es	.27	.64	.16	.09	.31	.67	.19	.32	.32	.55	.25
	%Imp.	57.9	75.9	52.6	56.0	58.4	76.9	52.0	60.0	52.8	71.4	56.5
	N	126	29	97	25	101	26	75	90	36	21	69
	PF Es	.29	.56	.20	.36	.28	.58	.17	.31	.22	.58	.22
	%Imp.	61.2	66.7	56.8	57.1	61.9	72.7	58.1	61.5	60.0	70.0	58.6
	N	49	12	37	7	42	11	31	39	10	10	29

Table 9.5.3 Percentage changed (Clinically significant and reliable change) for Coping strategy – ‘Social support’

Change		CS and RC		C.S. only		RC only		No change		Deteriorated		
Coping strategy		Group	No	%	No	%	No	%	No	%	No	%
Social support	Post-Treatment	All	5	13.9	4	11.1	22	61.1	4	11.1	1	2.8
		Male	2	16.7	2	16.7	6	50.0	2	16.7	0	0
		Female	3	12.5	2	8.3	16	66.7	2	8.3	1	4.2
	Follow-up	All	3	23.1	1	7.7	9	69.2	0	0	0	0
		Male	1	33.3	0	0	2	66.7	0	0	0	0
		Female	2	20.0	1	10.0	7	70.0	0	0	0	0

(percentage in bold; see table 7.3.3 for detail explanation concerning column data above)

Post- treatment results:

N.B: for all subjects (125 -29 males and 96 females) who had pre-treatment scores for coping strategy ‘Social support’; 90 (72.0% - 58.6% of the males and 76.0% of the females} came to the counselling with levels for ‘Social support’ which were not significantly different from the baseline norm.

Follow-up results:

N.B: for all subjects who had pre-treatment scores for ‘Social support’ 36 (73.0% of total at the follow-up stage –75.0% of the males and73.0% of the females) came to the counselling with levels for ‘Social support’ that were not significantly different from the baseline norm.

9.5.1 Social support – all subjects

From table 9.2 it can be seen that the mean scores for ‘Social support’ rose to stage 3 but had dropped slightly by stage 4. However, as can be seen from table 9.5.1 the initial mean for ‘Social support’ was significantly higher than the baseline mean at the pre-treatment stage and it continued to rise through the stages of the study making the resulting means even more significantly higher than the baseline mean. The means at the post-treatment stage and at the follow-up stage were significantly different from the pre-treatment mean. The difference between post-treatment and follow-up was not significant for all the subjects together.

Table 9.5.2 shows the mean effect sizes for measuring the strength of the change between the pre- and post means and pre- and follow-up means for all subjects and the percentage who have improved. From this can be seen that for 57.9% of all subjects there was a positive effect size by stage 3. The mean effect size changed at follow-up from .27 to .29 and the percentage improving rose to 61.2%.

Thus for all the subjects there was a mean improvement in ‘Social support’ scores between pre- and post-treatment, and this dropped slightly by stage 4, and the changes as measured

by the effect size was not high. However, what was more noticeable was that the mean scores for this coping strategy continued to grow as a result of treatment but that the mean started significantly higher than the norm and continued to be so.

This applied to all the main groups, 16-35 and 35-64+ year olds, and the professional and non- professional groups. The only main difference was that the changes between stage 2 and stages 3 and 4 were not significant for the non-professionals.

There was no significant difference between the groups of 16-35 and 36-64+ year olds, nor between the professionals and non-professionals in their use of this coping strategy.

9.5.2 Social support – gender

From table 9.2 it can be seen that the mean for ‘Social support’ for the males rose from stage 2 to stage 3 and then dropped slightly to stage 4, but in contrast with the subjects as a whole and the females, the mean for the males was not significantly different from the baseline norm at the beginning of the study but by stage 3 and 4 it rose for this group to be significantly higher than the baseline norm. The difference for the females was that at the pre-treatment stage the mean was significantly higher than the baseline mean and that the mean continued to rise and remained significantly higher than the baseline mean through all the stages of the study. Further, at stage 2 (pre-treatment) the mean for the females was significantly higher than that of the males, but at stages 3 and 4 the differences were not significant.

Table 9.5.2 shows the effect sizes for the magnitude of the change between the pre- and post means and pre- and follow-up means for the genders and the proportion who improved. From this can be seen that 75.9% of the males improved and that there was a higher than average mean effect size of .64 by stage 3, and though this dropped slightly by stage 4, it was still above average at .56 (with 66.7% having improved at this stage). For the females, there was little change as shown by the low effect size of .16 at stage 3 and .20 at stage 4 and the percentage improving was 52.6% at stage 3 rising slightly to stage 4 to 56.8%.

Table 9.5.3 gives the percentage of subjects who produced clinically significant and reliable change. The trends shown on an individual level were different from the findings at the group level as this proportion indicated those who produced significant change. Here the proportion of the males who produced clinically significant and reliable change was higher than the females at stage 3 of the study i.e. at the post treatment stage (16.7%

compared with 12.5%). By the follow-up stage the percentage of males achieving this rose considerably compared with the females who proportion also rose (33.3% and 20.0% respectively). Further, 4.2% of the females deteriorated by stage 3, compared with none of the males but by stage 4, none of the subjects had deteriorated in their mean score for ‘Social support’.

From table 9.5.1 concerning the sub-groups of males and females in the age group 36-64+ and in the professional group, it is seen firstly that the males in the groups followed the same patterns as for the males as a group, the only difference was that the change between stage 2 and stage 4 was not significant for the professional males. The female groups also followed a similar pattern to that of the females as a group, but here the exception was the 36-64+ year old females for whom the change between stages 2 and 4 was not significant. With respect to the measure of change i.e. the mean effect sizes, the gender sub-groups followed similar patterns to that of the genders as groups themselves. However, only all of the male groups produced above average effect sizes at both stages 3 and 4, (for above details - see appendix A18: tables A18.16-17 and 28-30 and appendix C9.3).

9.6 Coping strategy - Depressive response

Table 9.6.1 Showing where there was significant change between stages for the various groups examined. (✓ = $p < .001$; * = $p < .01$; + = $p < .05$; - = no significant difference) (stage 1 = baseline measure; stage 2 = pre-treatment; stage 3 = post-treatment and stage 4 = follow-up). (For details see A18: table A18.34 and C9.4: tables C9.4.1-64)

Coping strategy	Comp. with	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Depressive response	Stage 1	2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
		3	✓	-	✓	*	✓	-	✓	✓	-	+	✓
		4	-	-	-	-	-	-	-	-	-	-	-
	Stage 2	3	✓	=✓	✓	-	✓	*	✓	✓	-	*	✓
		4	✓	-	*	+	✓	-	✓	✓	+	-	✓
	Stage 3	4	+	-	*	+	-	-	-	-	-	-	-

Table 9.6.2 Mean effect sizes for change between pre- and post-treatment (stages 2 and 3) (PP Es) and between pre-treatment and follow-up (stages 2 and 4) (PF Es) – all groups of interest. (%Imp. = percentage of subjects improving; N. Prof. = Non-professional) (For details see A18: tables A18.18-19; 24-25 and C9.4: tables C9.4.65-91)

Coping strategy	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Depressive response	PP Es	.27	.47	.21	.22	.28	.48	.21	.29	.22	.40	.25
	%Imp.	59.5	65.5	57.7	52.0	61.4	65.4	60.0	63.3	50.0	71.4	60.9
	N	126	29	97	25	101	26	75	90	36	21	69
	PF Es	.44	.73	.34	.44	.44	.75	.32	.47	.31	.68	.40
	%Imp.	63.3	75.0	56.8	42.9	66.7	81.8	61.3	64.1	50.0	70.0	48.6
	N	49	12	37	7	42	11	31	39	10	10	29

Table 9.6.3 Percentage changed (Clinically significant and reliable change) for Coping strategy – ‘Depressive’ response

Change			CS and RC		C.S. only		RC only		No change		Deteriorated	
Coping strategy	Group		No	%	No	%	No	%	No	%	No	%
Depressive response	Post-Treatment	All	10	18.9	13	24.5	7	13.2	21	39.6	2	3.8
		Male	3	23.1	2	15.4	3	23.1	5	38.5	0	0
		Female	7	17.5	11	27.5	4	10.0	16	40.0	2	5.0
	Follow-up	All	6	28.6	4	19.0	7	33.3	4	19.0	0	0
		Male	2	22.2	1	11.1	3	33.3	3	33.3	0	0
		Female	4	33.3	3	25.0	4	33.3	1	8.3	0	0

(percentage in bold; see table 7.3.3 for detail explanation concerning column data above)

Post- treatment results:

N.B: for all subjects (126 -29 males and 97 females) who had pre-treatment scores for coping strategy ‘Depressive’ response; 75 (59.5% - 55.2% of the males and 60.8% of the females) came to the counselling with levels for ‘Depressive’ response which were not significantly different from the baseline norm.

Follow-up results:

N.B: for all subjects who had pre-treatment scores for ‘Depressive’ response 28 (57.1% of total at the follow-up stage – 25.0% of the males and 67.6% of the females) came to the counselling with levels for ‘Depressive’ response that were not significantly different from the baseline norm.

9.6.1 Depressive response – all subjects

From table 9.2 it can be seen that the mean scores for ‘Depressive’ response dropped through the stages 3 and 4 of the study for all the subjects together. From table 9.6.1 the initial mean for ‘Depressive’ response was significantly higher than the baseline mean at the pre-treatment stage and it continued to be so at stage 3 but by stage 4 the mean had

dropped to a point where it was no longer significantly higher than the baseline norm. The mean at the post-treatment stage and at the follow-up stage, was significantly different from the pre-treatment mean. The difference between post-treatment and follow-up was also significant for all the subjects together.

Table 9.6.2 shows the mean effect sizes for measuring the strength of the change between the pre- and post means and pre- and follow-up means for all subjects and the percentage who have improved. From this can be seen that for 59.5% of all subjects there was a positive effect size by stage 3. The mean effect size changed at follow-up from .27 to .44 and the percentage improving rose to 63.3%.

Thus for all the subjects there was a mean improvement in 'Depressive' response scores between pre- and post-treatment, and this continued to the follow-up stage (stage 4) but the change for all the subjects together as measured by the effect size was not high. However, what was more noticeable was that the mean scores for this coping strategy continued to drop as a result of treatment through all the stages.

This applied to the sub-groups, 16-35 year olds and the non-professionals. For the 36-64+ year olds and the professionals, while the mean score levels for this coping strategy dropped through the stages of the study, at stage 4 the means for these latter two groups was still just significantly higher than the baseline norm. But the change at least by stage 4 for all the sub-group was significant from stage 2.

There was no significant difference between the groups 16-35 and 36-64+ year olds, nor between the professionals and non-professionals in their use of this coping strategy.

9.6.2 Depressive response – gender

From table 9.2 it can be seen that the mean for 'Depressive' response for the males dropped sharply from stage 2 to stage 3 and then rose again to stage 4, but in contrast with the subjects as a whole and the females, the mean for the males was not significantly different from the baseline norm already by stage 3 whereas for the females the drop at stage 3 was not great as compared with the males, so it was not until stage 4 that the mean had dropped sufficiently that it was no longer significantly higher than the baseline norm. The rise at stage 4 meant that while the change for the males at stage 3 was significant, the change at stage 4 was not. For the females the change was significant at both stages.

Table 9.6.2 shows the effect sizes for the magnitude of the change between the pre- and post means and pre- and follow-up means for the genders and the proportion who improved. From this can be seen that 65.5% of the males improved and the mean effect size was .47 by stage 3, but this rose to above average of .73 at stage 4, (with 75.0% having improved at this stage). For the females, there was little change as shown by the low effect size of .21 at stage 3 and at stage 4 this rose slightly to .34 and the percentage improving was 57.7% at stage 3 dropping slightly to stage 4 to 56.8%.

Table 9.6.3 gives the percentage of subjects who produced clinically significant and reliable change. The trends shown on an individual level were different from the findings at the group level as this proportion indicated those who produced significant change. Here the proportion of the males who produced clinically significant and reliable change was higher than the females at stage 3 of the study i.e. at the post treatment stage (23.1% compared with 17.5%); but by the follow-up stage the percentage of males achieving this dropped slightly compared with the females who proportion rose (22.2% and 33.3% respectively). Further, 5.0% of the females deteriorated by stage 3, compared with none of the males but by stage 4, none of the subjects had deteriorated in their mean score for 'Depressive' response.

From table 9.6.1 concerning the sub-groups of males and females in the age group 36-64+ and in the professional group. The mean for this coping strategy for the males in the age group 36-64+ dropped at stage 3 such that it was no longer significantly higher than the baseline norm but then it rose again such that it was again significantly different from the baseline norm. For the male professionals the means at all the stages remained significantly higher than the baseline norm. Further for both sub-groups of males the change between stage 2 and 3 was significant for both groups, the change between stage 2 and 4 were not significant. The females in each of the sub-groups performed in a similar way to that of the females as a whole group. The only difference was that for the 36-64+ year old females the change between stage 3 and 4 was not significant. The only significant difference between subgroups was when the two professional status groups were compared. Here it was found that at stage 3 the professional males produced significantly higher mean scores for 'Depressive' response than the non-professional males (for above details - see appendix A18: tables A18.31-34 and appendix C9.4).

9.7 Coping strategy - Emotive response

Table 9.7.1 Showing where there was significant change between stages for the various groups examined. ($\checkmark = p < .001$; $* = p < .01$; $+ = p < .05$; $- =$ no significant difference) (stage 1 = baseline measure; stage 2 = pre-treatment; stage 3 = post-treatment and stage 4 = follow-up). (For details see A18: table A18.37 and C9.5: tables C9.5.1-66).

Coping strategy	Comp. with	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Emotive response	Stage 1	2	+	-	+	\checkmark	-	-	-	\checkmark	-	-	\checkmark
		3	*	-	$=\checkmark$	*	-	-	+	+	+	-	+
		4	-	-	-	-	-	-	-	-	-	-	-
	Stage 2	3	\checkmark	-	\checkmark	-	\checkmark	-	\checkmark	-	\checkmark	-	-
		4	\checkmark	-	\checkmark	-	\checkmark	-	$=\checkmark$	-	*	-	-
	Stage 3	4	-	-	-	-	-	-	-	-	-	-	-

Table 9.7.2 Mean effect sizes for change between pre- and post-treatment (stages 2 and 3) (PP Es) and between pre-treatment and follow-up (stages 2 and 4) (PF Es) – all groups of interest. (%Imp. = percentage of subjects improving; N.Prof. = Non-professional) (For details see A18: tables A18.31-32; 35-36 and C9.5: tables C9.5.67-93).

Coping strategy	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Emotive response	PP Es	.12	.01	.16	.18	.11	-.05	.16	.22	-.12	.16	.24
	%Imp.	41.4	53.6	50.8	44.0	52.5	42.3	56.0	57.8	33.3	52.4	59.4
	N	126	29	97	25	101	26	75	90	36	21	69
	PF Es	.27	.28	.27	.39	.25	.33	.23	.36	-.06	.46	.34
	%Imp.	50.0	43.2	44.9	42.9	45.2	54.5	41.9	48.7	30.0	60.0	44.8
	N	49	12	37	7	42	11	31	39	10	10	29

Table 9.7.3 Percentage changed (Clinically significant and reliable change) for Coping strategy – ‘Emotive’ response

Change			CS and RC		C.S. only		RC only		No change		Deteriorated	
Coping strategy		Group	No	%	No	%	No	%	No	%	No	%
Emotive response	Post-Treatment	All	10	30.3	3	9.1	4	12.1	16	48.5	0	0
		Male	3	50.0	1	16.7	0	0	2	33.3	0	0
		Female	7	42.2	2	11.8	4	23.5	4	23.5	0	0
	Follow-up	All	6	25.0	2	8.3	6	25.0	9	37.5	1	4.2
		Male	2	33.3	0	0	1	16.7	3	50.0	0	0
		Female	4	22.2	2	11.1	5	27.8	6	33.3	1	5.6

(percentage in bold; see table 7.3.3 for detail explanation concerning column data above)

Post- treatment results:

N.B: for all subjects (125 -29 males and 96 females) who had pre-treatment scores for coping strategy 'Emotive' response; 92 (73.6% -79.3% of the males and 71.9% of the females) came to the counselling with levels for 'Emotive' response which were not significantly different from the baseline norm.

Follow-up results:

N.B: for all subjects who had pre-treatment scores for 'Emotive' response 26 (53.1% of total at the follow-up stage – 50.0% of the males and 54.1% of the females) came to the counselling with levels for 'Emotive' response that were not significantly different from the baseline norm.

9.7.1 Emotive response – all subjects

From table 9.2 it can be seen that the mean scores for 'Emotive' response dropped through the stages 3 and 4 of the study for all the subjects together. From table 9.7.1 the initial mean for 'Emotive' response was significantly higher than the baseline mean at the pre-treatment stage and it continued to be so at stage 3 but by stage 4 the mean had dropped to a point where it was no longer significantly higher than the baseline norm. The means at the post-treatment and follow-up stages were significantly different from the pre-treatment mean. The difference between post-treatment and follow-up was not significant for all the subjects together.

Table 9.7.2 shows the mean effect sizes for measuring the strength of the change between the pre- and post means and pre- and follow-up means for all subjects and the percentage who have improved. From this can be seen that for 41.4% of all subjects there was a positive effect size by stage 3. The mean effect size changed at follow-up from .12 to .27 and the percentage improving rose to 50.0%.

The above applied to the sub-groups, 16-35; 35-64+ year olds and the professional group. The non-professionals came to counselling with levels for this strategy which was not significantly different from the baseline norm at stage 2, but by stage 3 it was significantly different but then returned to the pre-treatment state by stage 4. For most of the above groups the changes between stage 2 and stages 3 and 4 were significant, except for the professionals where the change between stages 2 and 4 were not significant and for the 16-35 year old groups where the changes between any of the stages were not significant.

There was also a significant difference between the groups 16-35 and 36-64+ year olds, at stage 3 of the study where the 16-35 year old group's mean was significantly higher than that of the 36-64+ year old group. There was no significant difference between the professionals and non-professionals in their use of this coping strategy.

9.7.2 Emotive response – gender

From table 9.2 it can be seen that the mean for ‘Emotive’ response for the males dropped slightly from stage 2 to stage 3 and then rose again to a level that was higher than the pre-treatment mean by stage 4, but in contrast with the subjects as a whole and the females, the mean for the males was not significantly different from the baseline norm at any stage of the study and there was no significant change between stage 2 and stage 3 and 4 for the males. This applied also to the two male sub-groups examine i.e. the 36-64+ year olds and the professional group. The results for the females as a group and the female sub-groups mirrored the results for the group as a whole.

Table 9.7.2 shows the effect sizes for the magnitude of the change between the pre- and post means and pre- and follow-up means for the genders and the proportion who improved. From this can be seen that 53.6% of the males improved but the mean effect size for the change was very low at .01 by stage 3, and this rose slightly to .28 at stage 4, (with 43.2% having improved at this stage). For the females, there was little change as shown by the low effect size of .16 at stage 3 and at stage 4 this rose slightly to .27 and the percentage improving was 50.8% at stage 3 dropping slightly to stage 4 to 44.9%.

Table 9.7.3 gives the percentage of subjects who produced clinically significant and reliable change. The trends shown on an individual level were different from the findings at the group level as this proportion indicated those who produced significant change. Here the proportion of the males who produced clinically significant and reliable change was higher than the females at stage 3 of the study i.e. at the post treatment stage (50.0% compared with 42.2%); and by the follow-up stage the percentage of males achieving this dropped slightly to 33.3% but was still higher than the percentage of females achieve this at this stage (22.2%). Further, none of the subjects deteriorated by stage 3, but by stage 4, still none of the males had deteriorated in their mean score for ‘Emotive’ response but 5.6% of the females had (for above details - see appendix A18: tables A18.31-32 and 35-37 and appendix C9.5).

9.8 Coping strategy - Passive response

Table 9.8.1 Showing where there was significant change between stages for the various groups examined. (✓ = $p < .001$; * = $p < .01$; + = $p < .05$; - = no significant difference) (stage 1 = baseline measure; stage 2 = pre-treatment; stage 3 = post-treatment and stage 4 = follow-up). (For details see A18: table A18.40 and C9.6: tables C9.5.1-70).

Coping strategy	Comp. with	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Passive response	Stage 1	2	*	✓	-	+	+	✓	-	+	+	=✓	-
		3	+	-	-	+	-	-	-	-	-	*	-
		4	-	-	-	-	-	-	-	-	-	-	-
	Stage 2	3	-	-	-	-	-	-	-	-	-	-	-
		4	+	-	+	-	-	-	-	-	+	-	-
	Stage 3	4	-	-	+	-	-	-	-	-	-	-	-

Table 9.8.2 Mean effect sizes for change between pre- and post-treatment (stages 2 and 3) (PP Es) and between pre-treatment and follow-up (stages 2 and 4) (PF Es) – all groups of interest. (%Imp. = percentage of subjects improving; N.Prof. = Non-professional) (For details see A18: tables A18.31-32; 38-40 and C9.6: tables C9.6.71-97).

Coping strategy	Stage	All	M	F	16-35	36-64+	M 36-64+	F 36-64+	Prof.	N.Prof	M.Prof	F.Prof
Passive response	PP Es	.04	.10	.02	-.09	.07	.18	.03	-.05	.25	-.22	.00
	%Imp.	42.1	41.4	42.3	36.0	43.6	42.7	42.7	38.9	50.0	23.8	43.5
	N	126	29	97	25	26	75	75	90	36	21	69
	PF Es	-.02	-.10	.01	.37	-.05	-.09	.09	-.16	.55	-.09	-.19
	%Imp.	40.8	50.0	37.8	42.9	54.5	35.5	35.5	35.9	60.0	50.0	31.0
	N	49	12	37	7	11	31	31	39	10	10	29

Table 9.8.3: Percentage changed (Clinically significant and reliable change) for Coping strategy – ‘Passive’ response

Change			CS and RC		C.S. only		RC only		No change		Deteriorated	
Coping strategy	Group		No	%	No	%	No	%	No	%	No	%
Passive Response	Post-Treatment	All	12	30.0	7	17.5	6	15.0	15	37.5	0	0
		Male	4	33.3	3	25.0	0	0	5	41.7	0	0
		Female	8	28.6	4	14.3	6	21.4	10	35.7	0	0
	Follow-up	All	4	28.6	1	7.1	6	42.9	3	21.4	0	0
		Male	1	20.0	0	0	1	20.0	3	60.0	0	0
		Female	3	33.3	1	11.1	5	55.6	0	0	0	0

(percentage in bold; see table 7.3.3 for detail explanation concerning column data above)

Post- treatment results:

N.B: for all subjects (126 -29 males and 97 females) who had pre-treatment scores for coping strategy ‘Passive’ response; 86 (68.3% - 58.6% of the males and 71.1% of the females) came to the counselling with levels for ‘Passive’ response which were not significantly different from the baseline norm.

Follow-up results:

N.B: for all subjects who had pre-treatment scores for 'Passive' response 35 (71.4% of total at the follow-up stage – 58.3% of the males and 75.7% of the females) came to the counselling with levels for 'Passive' response that were not significantly different from the baseline norm.

9.8.1 Passive response – all subjects

From table 9.2 it can be seen that the mean scores for 'Passive' response dropped through the stages 3 and 4 of the study for all the subjects together. From table 9.8.1 the initial mean for 'Passive' response was significantly higher than the baseline mean at the pre-treatment stage and it continued to be so at stage 3 but by stage 4 the mean had dropped to a point where it was no longer significantly higher than the baseline norm. The mean at the post-treatment stage was not significantly different from the pre-treatment mean but by stage 4 it was. The difference between post-treatment and follow-up was not significant for all the subjects together.

Table 9.8.2 shows the mean effect sizes for measuring the strength of the change between the pre- and post means and pre- and follow-up means for all subjects and the percentage who have improved. From this can be seen that for 42.1% of all subjects there was a positive effect size by stage 3. The mean effect sizes at stages 3 and 4 were very low.

The above applied to the sub-groups, 16-35 year olds and the professional group. For the 36-64+ year olds and the non-professionals the mean score for 'Passive' response was no longer significantly higher than the baseline norm by stage 3. But for the other groups the changes between stage 2 and the stages 3 and 4 were not significant except for the non-professionals and this only occurred for them between stages 2 and 4.

There was also a significant difference between the groups 16-35 and 36-64+ year olds, at stages 2 and 3 of the study where the 16-35 year old group's mean was significantly higher than that of the 36-64+ year old group ($p < .05$). Also the professionals produce a significantly higher mean for this coping strategy at follow-up (stage 4) than the non-professionals ($p < .05$ - 1-tailed) (see appendix C9.6: tables C9.6.39-40 and 63-64).

9.8.2 Passive response – gender

From table 9.2 it can be seen that the mean for 'Passive' response for the males dropped from stage 2 to stage 3 and then rose again by stage 4 but not to their pre-treatment state. The mean for the males remained significantly higher than the baseline norm until stage 4 but the change between the stages was not significant. This was slightly different for the sub-groups of males i.e. the 36-64+ and professional males in that not only were the mean

levels for 'Passive' response consistently significantly different from the baseline norm throughout the study, but also the change between all the stages was not significant. The females, in contrast to the males, came at the pre-treatment stage with mean levels for this coping strategy that was not significantly different from the baseline mean and this remained the case through all the stages of the study. In fact by stage 4 the mean level for the females dropped to where the mean was even lower than the baseline norm, thus the changes between stages 2 and 4 and between stages 3 and 4, were significant. This was different for the sub-groups of females i.e. the 36-64+ and professional females where not only were the mean levels for this coping strategy not significantly from the baseline norm at any stage of the study but the changes between the stages were not significant either.

Table 9.8.2 shows the effect sizes for the magnitude of the change between the pre- and post means and pre- and follow-up means for the genders and the proportion who improved. From this can be seen that 41.4% of the males and 42.3% of the females improved at stage 3, by stage 4 the proportion of males improving had risen to 50.0% but for the females this had dropped to 37.8%. But the mean effect size for both genders at stages 3 and 4 were very low.

Table 9.8.3 gives the percentage of subjects who produced clinically significant and reliable change. The trends shown on an individual level were different from the findings at the group level as this proportion indicated those who produced significant change. Here the proportion of the males who produced clinically significant and reliable change was higher than the females at stage 3 of the study i.e. at the post treatment stage (33.3% compared with 28.6%); and by the follow-up stage the percentage of males achieving this dropped to 20.0% and the percentage for the females rose to 33.3%. Further, none of the subjects who were in the dysfunctional group for this coping strategy at the pre-treatment stage (stage 2) deteriorated at either stages 3 or 4 as a result of the counselling. When the genders were compared the males came to the counselling (at stage 2) with significantly higher levels for responding with this coping strategy than the females, and by stage 4 their levels were still significantly higher than the mean for the females at that stage (for above details - see appendix A18: tables A18.31-32 and 38-40 and appendix C9.6).

9.9 Summary - Coping strategies

9.9.1 Baseline ‘Well-being’ study

In the ‘Well-being’ study it was found that the male respondents would cope with stress with more ‘Rational actions’ than the females, whereas the women would use more ‘Palliative’ methods of coping than the men, i.e. seek ways to alleviate the problem without dealing with it. Women would also use their ‘Social supports’ better than men, but the females would also tend to react with ‘Depressive’ or ‘Emotive’ responses, like taking it out on a partner/spouse, more often than the men, though the men showed they were more likely to react with ‘Passive’ responses than the women, i.e. have a drink and try to forget about it.

9.9.2 Comparison with Counselling Sample

This pattern of response was echoed in those coming for counselling, though those coming for counselling differed from the baseline sample population in some very clear ways. Both the males and females came, as might be expected, with considerably higher levels for ‘Depressive’ response than the baseline population. The females came with much higher levels for ‘Emotive’ response and the males with higher levels for ‘Passive’ response. However, one of the most interesting differences was that both the male and females who came for counselling scored means for use of ‘Social support’ as a coping strategy, which were significantly higher than the baseline mean. This might suggest that it may have been their ability to use this coping strategy i.e. being able to talk to someone about their problems, which allowed them to consider using and to use the counselling service.

9.9.3 Effectiveness of counselling

When examining the effectiveness of the counselling process there were also some variations in its effectiveness depending on the gender and coping strategy examined.

Rational actions

In the baseline ‘Well-being’ study, males showed that they would tend to respond using ‘Rational actions’ more than the females. In the counselling sample the males came with significantly higher means than the females, at the pre-treatment stage. But this difference disappeared at the post-treatment and follow-up stages. In the counselling sample, all groups except the 36-64+ year old males, came with mean levels for this coping strategy which were significantly different from the baseline norm. Further, the 36-64+ year olds showed more significant change between stage 2 and stages 3 and 4 as compared with the

younger age group. But it was the younger age group of 16-35 year olds when compared with the 36-64+ year olds who produced an above average mean effect size.

But it would seem that those who benefited most from the counselling for this coping strategy were the females including the 36-64+ year old females and those in the professional group. But it was the males including those in the 36-64 year old and in the professional groups who achieved a higher than average mean effect size and the males also managed by the follow-up stage to increase the percentage who achieved clinically significant and reliable change as compared with the females where the percentage achieving this dropped to nearly half of those achieving that at stage 3 of the study. However, while the males unusually continued to improve on their mean scores to the follow-up stage, at no time was the mean, for the males for this strategy, outside that of the baseline norm population, i.e. it was within one standard deviation of the norm. So while the counselling improved the levels of coping for 'Rational action' for all subjects, the females seemed to have gained significantly more as a group as the males' mean level at stage 2 was significantly higher than that of the females and was not significantly different from the baseline norm, but it would seem that the female's gain after treatment brought their mean response levels to that of the males and within the normative population.

Palliative responses

In the baseline 'Well-being' study, females showed that they would tend to respond using 'Palliative' response more than the males e.g. using a hobby or pastimes. In the counselling sample, all groups (other than the 36-64+ years old as a group; the 36-64+ females and the non-professionals) came with mean levels for this coping strategy which were not significantly different from the baseline norm. The groups that were the exceptions, changed at stage 3, as a result of the counselling, to levels which were not significantly different from the baseline norm. For the counselling group though the females came with a mean score that was higher than the males, the difference was not significant. This is in contrast to the results from stage 1 where the females scored a mean that was significantly higher than the males for this coping strategy. Thus in summary, the counselling treatment had little effect on this coping strategy for any of the groups as, with the exceptions of the 36-64+ year olds, including the females of this group and the non-professional, most of the groups' mean scores for this coping strategy were not significantly different from the baseline norm at any stage of the study. Further the only significant differences between groups for 'Palliative' response, were that all the subjects

together and the females in the 16-35 age group scored significantly higher means at the post-treatment stage than those in the 36-64+ age group.

Social supports

In the baseline 'Well-being' study, females showed that they would tend to respond using 'Social support' e.g. using friends and social interaction, more than the males to cope with their stress. For the counselling sample, there was also a significant difference between the genders with respect to their means for the use of 'Social support' at the pre-treatment stage, with the females coming with a significantly higher mean score than the males, but this difference disappeared at post-treatment and follow-up stages. Within the counselling sample all groups other than the males separately or in each male group came with mean levels for this coping strategy which were significantly higher than the baseline norm. For the counselling group as a whole and for the genders examined separately the levels of use of this coping strategy improved as a result of the counselling in that having started higher than the baseline mean they continued to score means even higher than the baseline mean through all the stages of the study. Thus the counselling treatment had a strong positive effect on the subjects in that the levels for this coping strategy rose for the most part through out the study, with the males benefiting most as they came with a level that was not significantly higher than the baseline mean and with a mean that was significantly lower than the females but by stage 3 the difference was not significant. Further, the concept of clinically significant change was not helpful for this coping strategy as it seems the counselling improved this response, but the subjects arrived for counselling with higher response means than the norm any case and with improvement the means remained significantly higher than the baseline mean putting the means, through out the study outside the 'functional' population (the working definition for calculating clinically significant change).

Depressive response

Within the baseline sample the males showed that they were less likely than the females to use 'Depressive' response as a coping strategy, an example of this would be to bottle up one's feelings. However, this was not the case for the males coming for counselling who were significantly more depressed than the baseline sample. Though the males came with a higher mean than the females, the difference was not significant at the pre- or post-treatment, or at the follow-up stages. There was also no significant difference between the genders in any sub-groups and the only significant difference was at stage 3 between the professional and non-professional males. The males seemed to have gained more

consistently from the process of the counselling by the post-treatment stage than the females, though by the follow-up stage the males also consistently lost the benefits they had gained at the post-treatment stage. While the females, who came for counselling, also had very high levels for this coping strategy and they benefited a great deal from the counselling in not only changing this coping strategy to the level of the baseline population but were also able to sustain this change at least for 6 months. All groups came with mean levels for this coping strategy which were significantly much higher than the baseline norm. For the counselling group as a whole and for the genders examined separately the levels of use of this coping strategy improved as a result of the counselling at least to stage 3. But by stage 4 (six month follow-up stage) the mean level for the males dropped again but not to the pre-treatment levels and as the males started at a relative high mean then the effect size for the change was above average by that stage. But the females continued to improve further between stage 3 and 4 such that the change between stage 2 and stage 3 and 4 continued to be significant.

The counselling treatment had a strong positive effect on the subjects in that the levels for this coping strategy dropped for the most part throughout the study, with the males benefiting most at stage 3, but the females showed more significant change between stage 2 and both stages 3 and 4. The males as a group and within the sub-groups consistently showed above average mean effect sizes at stage 4. The percentage producing clinically significant changes at stage 3 was not very different between the genders but by stage 4 a higher percentage of females than males produced this. Thus the counselling was able to produce considerable benefit to those coming for counselling with respect to lowering the levels of coping with stress by way of responding with depression i.e. feeling powerless to do anything about one's circumstances.

Emotive response

For the coping strategy of 'Emotive' response, in the baseline 'Well-being' study, males showed that they were less likely than the females to use 'Emotive' response, an example of this would be to shouting at colleagues, family, etc. For the counselling sample, all the subjects together and the females separately came with mean levels for this coping strategy which were significantly higher than the baseline norm. For all the subjects there was a mean improvement in 'Emotive' response scores between pre- and post-treatment, and this continued to the follow-up stage (stage 4) but the change for all the subjects together as measured by the effect size was not high. However, what was more noticeable was that the mean scores for this coping strategy continued to drop as a result of treatment through all

the stages. The counselling treatment had a strong positive effect for this coping strategy on the females but not for the males whose mean response levels at any stage of the study was not significantly different from the baseline norm. However, for those who did come with levels that were significantly different from the baseline norm, a higher percentage of males compared with the females both at stage 3 and at stage 4 improved enough to produce clinically significant and reliable change. Also the proportions of males showing clinically significant and reliable change was high bearing in mind that just over 75% of the males came to counselling with response levels for this coping strategy that was not significantly different from the baseline norm so were excluded from this measure. Overall the differences in effect appear to be related to gender and not on sub-groupings, except for the 16-35 year olds where, like the males, the change between stages as a result of the counselling was not significant at any stage.

Passive response

With respect to 'Passive' response, the males in the baseline 'Well-being' study, showed that they were significantly more likely than the females to use this response as a coping strategy, an example of this would be to go to have a drink and hope the problem will go away. Counselling for the coping strategy of 'Passive' response seems to have had limited effect in producing a significant reduction or change in this group of subjects. Overall it seems that the males came with significantly higher mean scores for this coping strategy than the females and while this significant difference disappeared at post-treatment, the difference returned at the follow-up stage. Treatment for 'Passive' response was not very effective for any of the male groups. All the subjects together and the males separately came with mean levels for this coping strategy which were significantly higher than the baseline norm. For the females the mean response at any stage of the study was not significantly higher than the baseline norm. By stage 4 the mean for the females was in fact lower than the baseline norm. Only for the females at stage 4 was the change significant, but the change for all the groups as measure by the effect size was very small. The age group 16-35 came with significantly higher mean response levels for this coping strategy than the 36-64+ year olds and the professionals had significantly higher mean responses than the non-professionals at stage 4.

Overall, very few groups experience sufficient change for 'Passive' response, as a result of the counselling, to produce above average mean effect sizes. Thus the counselling for the coping strategy of 'Passive' response seems to have had limited effect in producing a significant reduction or change in this group of subjects.

9.10 Conclusions

From the baseline sample it was found that men and women use different coping strategies to deal with stress. These results have shown that men use predominantly the more positive coping strategies of 'Rational actions' i.e. seeking solutions to their stress problems or 'Passive' responses i.e. cope passively by avoiding them hoping the problems will go away e.g. by drinking alcohol. Whereas women seem to opt for the use of more 'Palliative' coping strategies e.g. using hobbies or pastimes, or using coping strategy of 'Social supports' e.g. talking with friends etc., as positive coping strategies. But if they don't use these they will tend to respond more than the men with 'Depressive or Emotive' response methods.

However, those coming for counselling, both the males and females were high in the use of 'Social supports' and 'Depressive' responses. The latter is maybe not surprising, and the former was maybe why they thought to use counselling as a means of dealing with their stresses. Nevertheless, the effectiveness of the counselling process varied.

The females were helped to improve their skills in responding with 'Rational actions' and were able to sustain the change at follow-up. They were also able to reduce the level in which they responded with 'Depressive, Emotive and Passive' responses and were also able to sustain this change or improve on it by the 6 months follow-up. Counselling did not seem to help to produce any significant change for the females for using 'Palliative' response or 'Social supports', although they were already high on these two coping strategies, so maybe much change would not be expected.

In contrast, the males seemed to have been helped less by the counselling process in that the only coping strategy where improvement was found and which was sustained at follow-up was that of 'Social support'. They were already higher than the norm for this strategy and were able still to benefit from the counselling in this. The males were also helped by counselling to lower their 'Depressive and Passive' responses but unfortunately this improvement did not seem to have been sustained at follow-up. The males were not helped to increase their 'Rational action', as perhaps they were already high on this strategy and there was little change in their level of coping using the 'Emotive' response, perhaps again because they were low in this response and not very different from the males in the baseline sample.

Generally the changes were in line with the changes in levels of work place stress, mental health and work and personal functioning, but what also became clear was that other variables, such as age, and professional status interacted with gender to give some varying results, particularly with respect to the effectiveness/efficacy of the counselling. However, while the other demographic variables had some effect, the gender differences were much more of a controlling factor in the variability of the effectiveness of the counselling process.

10. Discussion – Whole study

The main concern or focus of this study was to look at the effectiveness of the brief therapy as offered through an employee assistance programme in producing change with respect stress reactions, mental health, work and personal functioning and coping strategies. For most counsellors, particularly in brief therapy, the main focus of their work, as neopragmatic postmodernist practitioners, would be to facilitate in the clients changes in their coping strategies that would help them be more effective in coping with the stressors that they experience in their lives, and in the setting of EAP work, the stress they experience from work and/or home or the interaction of both. Within this focus, this study also aimed to look at a number of demographic differences in the effectiveness of the therapy, such as gender, age and professional status. It was hoped, in keeping with the concept of the postmodernism where the practitioner develops his/her practice through evidence based practice of psychology (EBPP), that by examining these factors, counsellors could learn to be more effective or focussed in promoting change and being able to examine with whom a certain focus was more effective. This, then, would be more informative to the counsellors in what would be the most efficient focus for the work with their clients. The relevant point here was that the aim of the study was to allow for or to facilitate research informed practice (EBPP – evidence based practice), as unfortunately, it is felt that much research into counselling and psychotherapy is so refined, and therefore controlled, in order to make it more scientific, following the modernist conceptual framework or goal of seeking to find the ultimate basic laws governing all human behaviour, that the results become too devoid from the realities of the therapy room and hence of little help in improving or focussing practice. The neopragmatic postmodernist practitioner develops his/her own theory for practice using systematic integrative multimodal levels of analyses as a direct result of the failure of the modernist philosophical view of particularly the psychological world of the individual. Thus the modernist academic psychologist's research offers little to the practitioner in its failure to provide much useful knowledge that will aid the practitioners in helping their clients to cope better with the world.

The study found that the effectiveness of the counselling in changing the responses to the different variables examined varied depending on the gender, age and professional status, of the subjects and the sub-variables within the work stress factors, mental health, work and personal functioning and coping strategies. The importance of the examining coping strategies was that while work stress, mental health, work and personal functioning were

symptoms of difficulties with which the subjects might need help, the differences in coping strategies related to the behaviour which made these symptoms either worse or better.

To facilitate the discussion on the results and to be able to compare these with other findings, it was felt easier to discuss the issues under sub-grouped sections, which focussed first on the results for stage 1, the 'Well-being' study, the demographic responses to stage 2 and then to examine the results for work stress, mental health, work and personal functioning and coping strategies. Then the result will be discussed for these variables first by looking at the sample as a whole and then under the sub-headings of the various demographic groups that were examined so that the demographic differences and the implications of these differences can be understood.

10.1 Discussion of the baseline normative study (stage 1)

10.1.1 Introduction

The baseline normative study (stage 1) was set up in order to try to deal with the problems of having control groups against which to measure the change process within the counselling study. It was felt that if the same tools were used with a random sample of the population from which the counselling subjects were coming, then the results would at least act as a 'yard stick' against which to measure differences with respect to the counselling group of subjects and to see how far they improved as measured by the movement towards the normative levels as measured by the baseline population. This study was perhaps a victim of its own success in that the response was large and thus provided a considerable amount of data. However, this also provided excellent baseline normative data against which to compare the counselling sample. It also perhaps provided better comparative data than many other studies that drew conclusions from comparatively much smaller samples. More importantly it allowed for an examination of the assumptions of previous findings where generalised statements like 'males experience more stress than females' have been accepted without examining whether this was true for all males or only specific sub-groups of males. This part of the study looked at the variations found within a number of sub-groups mentioned in other research and examined whether previous findings were supported by the present study or not. The groups/subgroups examined were, gender, age and professional status. Unfortunately previous studies examining, for example gender/age, interactions were somewhat limited as was for example gender/professional status interactions. Hopefully this part of the study has addressed some of these issues. Further, it was important not to lose sight of the *raison d'être* of the 'Well-being' study, the data has provided for more precise normative sample data allowing for comparisons to be made between the counselling sample and specific baseline data for particular groups.

There can also be questions about the validity of some of the normative samples used in other studies, in that frequently university students would be used and one can ask how representative of the general population can students be said to be. However, this baseline sample might also not be representative, in that it can only be said to be representative of a local government work force, a main employer in a large county and cannot be said to represent work stress, for example in other areas of Britain or from other types of employers. What is perhaps unique about this study was that it was a large sample and the counselling group were from that same sample, so any comparison has to be as valid or perhaps more valid than other groups used for comparison. The fact of being such a large

sample also meant that considerable data was available. What became apparent was that stress at work was a complex issue with a number of interrelated variables affecting the outcomes, producing, rarely, any simple linear relationships. This made it very difficult to present the data easily in a coherent simple way, thus it was decided to present the discussion of the findings under the headings below.

10.1.2 Gender differences

According to Kiev and Kohn (1979) and Jick and Miz (1985), many studies which have examined stress at work, have used samples which have been statistically unsuitable to the investigation of sex differences and hence they tend to group men and women together. Yet Beehr and Schuler (1980), and Ivancevich and Matteson (1980), viewed gender as a moderator between stressors and the responses, suggesting that the perceptions of stress and the coping strategies used to deal with that stress were affected at least by the gender of the subjects. These findings for stress amongst the large sample of the work force within the organisation examined, tended to confirm this, in that overall the males experienced significantly more stress than the females, particularly for 'Factors intrinsic to the job'; 'Career and achievement'; and 'Organisational structure and climate', though the ranking of the various levels of stress varied much in the same way for both groups. It is difficult to know what 'Factors intrinsic to the job' might mean to this set of employees, but it will be around perhaps low value of the work, low use of skills, lack of variety and repetitiveness, conflict of demands, insufficient resources and workload (Kasl, 1992); all very characteristic of many jobs within a local authority. The question that is not easy to answer is what makes this more difficult for the males as compared with the females? The answer to this may lie in the characteristics of the males who produced this higher stress level. This will be discussed below. Further the males had significantly higher stress levels than the females for 'Career and achievement'. This would be to do with, maybe, under or over promotion or frustration at having reached a career ceiling (Marshall, 1977). Similarly, what makes the males more vulnerable to stresses relating to the factor 'Organisational structure and climate'? This possibly relates to role ambiguity, role conflict and role insufficiency rather than role overload or responsibility (Bhalla et al, 1991). The question here is what makes males more vulnerable to these factors than the females, is it issues of life balance, social expectations or the career and pay structures, differences in status or role, within the organisation examined? Others suggest that men and women differ very little in their appraisal of stressful events (Folkman and Lazarus, 1980; Karasek et al, 1981). This study does not appear to agree with this view. However, this view of the findings could be seen differently when looking at the various sub-groups below.

The exception to the apparent stress response differences, was that there was no difference in the level of stress that both groups experienced with respect to 'Home/work interface'. Maybe the finding that the males experienced more stress than the females is not such a surprise, though it is more interesting to note that the males struggled with the factor concerning 'Home/work Interface' as much as the females did. Clearly this was a critical issue for both and is supported by other research which suggests 56% of respondents felt their jobs seriously interfered with their home lives (Canadian Mental Health Association – 1984). Clearly, for both men and women the major concern was the difficulties with respect to the boundary between work and home, in fact at times work stress can spill over into home life (Bacharach et al, 1991; Burke, 1986), and vice versa. The idea that work and non-work activities do not interact in their psychological, physiological and health effects, have been described as the 'myth of separate worlds' by Kanter (1977). Chronic stressful experiences at work may have a detrimental effect on family relationships and this may go undetected.(Gutek et al, 1988; Repetti, 1987; Repetti and Crosby, 1984; Voydanoff and Kelly, 1984). The issue of work spilling over into home life can be subsumed under the issue of work/life balance was clearly a major source of stress to these subjects and remains so to the present for the population in Britain (The Mental Health Foundation, 2002). The stress caused by the fact that jobs today are not for life and most families now have two earners, but worse the recent development of the long working hours culture in Britain has progressively detrimental affects on family life and to the individuals, in one study 56% of manager reported this to have a detrimental effects on physical health, 54% on their relationships with their children, 60% on their relationships and 46% said it undermined their productivity (Worrall et al, 2004). The effects of these stress factors need to be noted by employers as the employees are the organisation's single most expensive resource yet frequently they come second to role of machines etc. To operate successfully in a competitive market with the best possible human resources they need to support, nurture and value their people. Fairhurst (2008) noted that the workplace has yet to become a truly employee centred place, he felt that too often the focus was more about getting things done as efficiently and effectively as possible, than caring about the workforce and this applied both to public and charities as it does to commercial firms. Yet it is said that when employees are engaged in utilising their natural talents, they provide an instant and constant competitive edge to the organisation (Coffman and Gonzalez-Molina, 2002).

The result of much of this work place stress is seen as the cause of sickness. Workplace stress is seen as being responsible for more long-term sickness absence than any other core factor. Absence comes as a result of increased workloads, longer working hours, lower moral, increased mistakes and accidents, culminating in reduced productivity (Kinder et al, 2008). Rees and Cooper, (1990) found that sickness was not strongly related to stress and had a low correlation with mental health, though it did significantly correlate with job satisfaction. In this study even though the males suffered significantly more stress than the females, only the females' stress correlated with 'days off sick'. Pearlin and Schooler (1978) suggested that men more often possess better psychological attributes or employ more effective responses for controlling stress and women get sick and collapse more often than men (also Etzion and Pines, 1981). The part about women getting sick more often is supported by the findings, but the finding that the males were responding with significantly lower efficiency levels (lower 'presenteeism') than the females, does not seem to support the idea that men have more effective ways of dealing with stress, just different ways. The males lowering of 'presenteeism' supports the idea that stress effects decision making and general loss of vitality/effectiveness (Quick and Quick, 1984). The levels of presenteeism were perhaps reflected also in the Gallup study which showed that in the U.K 19% of employees were engaged in their work; 61% were not engaged and 20% actively disengaged (Brewer and Sanford, 2008; Fleming, 2008). That finding also indicated that many of those who are actively disengaged were looking for work elsewhere. In 2004 it was been found that 48% of employers with more than 500 employees expect difficulty retaining their staff (CIPD October 2004 survey) and yet in 2003 the average cost of recruitment per individual employee was £2,500 across all business sectors (CIPD 2004 annual survey). But where the stress on the staff was not being taken in consideration, in this study the levels of presenteeism for all and each of the genders correlated significantly and negatively with all the stress factors, meaning as the stress went up the level of reported efficiency/effectiveness went down. Overall, though, the above does underline that there are certain generalised gender differences in the experience or at least the responses to stress.

Another response to stress is the levels of consumption of alcohol. For the subjects as a whole, all stress factors correlated with the subjects' weekly intake of alcohol. Interestingly, though this applied mainly to the females. Whereas the only factor that correlated with increased weekly intake of alcohol for the males was 'Career and achievement'. Also presenteeism had a significant negative correlation with 'weekly intake of alcohol' for all the subjects and particularly for the females, that is, as the levels of

working effectively/efficiently went down so the consumption of alcohol went up – was this cause or effect?

Looking at how males and females reacted under stress, overall it was seen that there were significant differences between the genders in their likelihood of responding using the various coping strategies. Etzion and Pines (1981) noted that women tended to seek help and social support more effectively than men. In this study, the males were significantly more likely to respond to stress using 'Rational action' or 'Passive' responses whereas the females respondents would cope with stress more than the males using 'Palliative' response, 'Social support', 'Depressive and Emotive' response. This last would support the idea that women report more symptoms of emotional distress and depression than men (Rosenfield, 1980; Haynes and Feinleth, 1980; Aneshenel et al, 1981; Cleary and Mechanic, 1983; Grove, 1979; Cooper and Davidson, 1982; Karasek et al, 1981; Levenson et al, 1983); and used social supports significantly more than the males (Etzion and Pines, 1981). The 'Passive' response that the males were more likely to use, was to increase their consumption of alcohol as their stress went up, whereas for the females their 'weekly alcohol intake' correlated with most of the coping strategies other than 'Rational action' and 'Palliative' response. Johnson (1982) noted that men have higher rates of problem drinking. Jick and Mitz (1985) suggested that there were clear differences between the genders in styles of coping and this study shows that these differences were significant.

Overall the results confirmed the complexity of the stress experience and the responses to it. Karasek (1979) suggested the possibility that the characteristics of work stress may not have a linear association with the worker's coping strategies/health and that there may be an interactive relationship involved. Lazarus (1966) and Lazarus and Folkman (1984) underlined the inter-relationship between the stress experienced by an individual and the coping strategies that the individual may have learnt to use to deal with that stress.

However, one of the issues raised at the beginning of this report was the cost of all this stress. In this study it was calculated that total number of 'days off sick' for the sample was 13,310 days a year. Based on this figure an extrapolation to the whole organisation (total work force = 17,614) would give a total of lost working days to sickness in a year as being 106,564.7 days lost per year. Compared with the CBI estimates this works out at 60,500 days lost a year for a work force of 10,000 compared with the CBI estimate of 73,000 days per year (CBI Conference, 1992). This would actually suggest that this local authority compared well or better than the estimates in private business. The figure for the estimated

cost of the sickness of the sample was nearly £647,000. If this figure was extrapolated for the whole of the organisation's work force of 17,614 this would give a figure of the cost of sickness to the organisation of nearly £5.2 million (or equivalent to £6.9 million in 2008). The Mental Health Foundation, (2005) estimated stress-related sick leave costs to the U.K economy £93 billion every year. If the estimated proportion of the cost due to stress related disorders was considered to be 60% of the cost of sickness (Kearns, 1986), then the individual cost of stress would be £198 per head and if 71% of that stress related sickness was attributed to work as suggested by Cooper and Davidson (1982) this would work out at £140 per head (equivalent to £187 per head at 2008 rates) which is larger than the estimated figure of £100 per head estimated by the CBI (CBI Conference, 1992).

The cost of presenteeism for the sample as a whole was over £1,988,327. If this figure was extrapolated for the organisation as a whole, the cost of presenteeism was estimated to be £33.2 million. The estimated total cost of stress to the organisation was seen as the sum of the cost of sickness and the cost of 'presenteeism' i.e. £2 million for this sample. If extrapolated for the whole work force then the figure for the total cost of stress to organisation is estimated at £35.2 million per year. (If this is converted equivalent figure taking the inflation rate from July, 96 to December, 2008 as being 33.9% {InflationData.com} then the sum would be equal to £47.1 million per year). Jones et al (1988) suggested that 40% of any work force could be experiencing stress related problems (Cox and Mackay, {1981} thought 54% had cited work as being a major source of stress. From this sample, in the calculation concerning the levels of presenteeism, it was found that the percentage was below that for stress quoted above, in that the percentage of those experiencing levels below the considered norm of 80% performance levels was 27% of the whole sample, or 33% of the males and 23% of the females (only those below the 80% level were used in order to calculate the cost of presenteeism). The women of the sample estimated that they have more sick leave than men and so they cost the organisation 4.4% more in sickness costs. But the cost of 'presenteeism' was higher in men, costing the organisation 21.6% more than the women. Thus the total stress for the men cost the organisation 13.2% more than the stress costs for the females. However, the differences in the costs for sickness for both genders were not significant. But the males' costs for presenteeism and hence the total stress costs were significantly different from that of the females. Comparisons with Jones et al (1988) and Cox and Mackay (1981) are difficult as it is not clear how they arrived at their figures and thus whether the rationales used were equivalent. But the calculations above from this present study used real figures and were not therefore estimates as frequently cited by other studies (The Mental Health Foundation,

2005). This was because this study's data was calculated from reported individual levels of sickness and efficiency and the cost calculations were based on their actual salaries.

The core question for this study was whether the stress levels can be reduced and copings strategies changed, e.g. can the level of presenteeism be increased by the counselling process and hence perhaps saving the organisation money and thus show that it is cost effective? This will be examined in the counselling section.

10.1.3 Age differences

Bunce (1997) noted that scant attention had been paid to factors which influence the experiences of stress and coping strategies such as age and gender. Thus, when examining age differences it was found there was a much more complicated pattern in responding to stress. When the age groups 16-35 and 36-64+ were compared, it was found firstly that there were no differences between the age groups with respect to 'Organisational structure and climate and 'Total work stress'. But there were significant differences between the groups for all the other stress factors. The younger age group experienced significantly higher levels of stress with respect to 'Relationships with others' and with 'Career and achievement' when compared with the older group of 36-64+. These findings would seem to be in contrast to Cooper (1978 and 1983) who suggested stress, particularly in relation to career and fear of redundancy (obsolescence) and failure would affect the older workers more as it was suggested they would be able to adjust less to change and become more vulnerable as they value stability (Robertson and Cooper, 1983; Sleeper, 1975). Further, it has been argued that good relationships between workers and members of work groups are essential for both individual and organizational health (Cooper, 1981; Sauter et al, 1992). Low interpersonal support at work has been found to be associated with high anxiety, emotional exhaustion, job tension and low job satisfaction (Beehr and Newman, 1978; Davidson and Cooper, 1981; Pearse, 1977; Warr, 1992). This supports the idea that the older group had less problems with respect to 'Relationships with others' as they were significantly more able to use social supports than the younger age group, as seen when the coping strategies were examined. Maybe the younger group were having to develop the interpersonal supports, and together with struggling to find themselves with respect to self esteem via status i.e. 'Career and achievement', it may not be a surprise that this group might experience more stress from these two factors than the older 36-64+ year olds. The older 36-64+ year olds perhaps are likely to have been with the organisation longer and/or were in more senior positions therefore have higher self esteem, if sense of self is focused on their position/status at work. The older group experienced significantly more stress with

respect to 'Factors intrinsic in the job', 'Managerial role' and 'Home/work interface'. This is perhaps because this age group was more likely to be in managerial roles and have families, and so would find the demands the job made on them more stressful. They may also begin to resent the amount of time their work takes them away from achieving a satisfactory work/life balance which would tend to ameliorate the effects of stress or reducing the experience of it. Hingley and Cooper (1986) argued that 'Home/work interface' involved trying to resolve the conflicts of demands on time and commitment particularly if there are young children involved (Larwood and Wood, 1979; Bhagat and Chassie, 1981). The older group were more likely to experience these conflicts, especially if they were managers (Beattie et al, 1974).

What the above suggests is that the experience of stress changed with age group and hence by extension changed with age. This would suggest that the experience of stress are less personality related, as suggest by many e.g. Cooper and Baglioni (1988) as they seem to change with age.

10.1.4 Age/gender differences

To underline Bunce's point, variations in age group response still do not state the whole issue. Responses also vary depending on the gender of the age group being examined. As much as it was found that there were gender and age differences in the experience and responses to stress, it was equally important to examine how these two variables may interact. When age was controlled for gender, a greater variability was found suggesting that the experience of stress was not only age related but also changed depending on the gender of that age group. The older males (36-64+) experienced significantly greater stress from factors, 'Factors intrinsic to the job', 'Managerial role', 'Home/work interface' and hence experience more 'Total work stress' than the younger 16-35 year old males. On the other hand the older females only experience significantly higher stress levels with respect to 'Managerial role' and it was the younger females age 16-35 who experienced significantly higher stress levels involving 'Relationships with others' and 'Career and achievement'. However, when the genders were compared while controlling for age grouping, it was found that there were few differences between the sexes for the younger age group 16-35. Here it was found that the males had significantly higher stress levels for 'Organisational structure and climate' than the females; and the females experienced significantly higher stress for 'Home/work interface' than the males. But when the older age group 36-64+ was examined the picture was very different. For this group, the males had significantly higher mean stress levels for all the factors except for 'Home/work

interface', here they still recorded a higher mean for this factor, but the difference compared with the females, was not significant. This finding challenges previous findings that this stress factor mainly affects women (Larwood and Wood. 1979; Bhagat and Chassie, 1981). The present study finds this only to be true of the younger age group of women (16-35), who are likely to be trying to balance the needs of their children with the demands of their job. But for the older group both males and females struggled as much as each other to deal with this stress factor as they perhaps both were in responsible demanding positions and begin to resent the loss of life balance and struggle to find better work/life balance. But this may also reflect changing attitudes to childcare and family life among the males in the 1990's.

Examining age only, it was seen that there was no significant difference between age groups in the 'Total work stress' experienced, but when broken down into gender and age differences it was seen that the older males did show significant differences in 'Total work stress'. Even this does not tell the whole story as illustrated above, thus there was a need to break-down the 'Total work stress' into its component factors so as not to mask differences in responses which can confound each other if summed. Thus, when the likes of Ivancevich and Matteson (1980) suggest that the individual's response to various stresses is partly determine by their gender, they should have added that the response and experience is also partly determined by the age of that gender and the stress factor being examined, too.

With respect to coping strategy differences between the age groups while controlling for gender, it was found that the only significant differences were that the younger age group of 16-35 year olds were more likely to use 'Emotive and Passive' responses. It was the younger males when compared to the older males who were significantly more likely to respond using these coping strategies. When the females were compared, the younger females were significantly more likely to respond using 'Emotive' response. The older females, when the females were compared, also scored significantly higher means for possibly taking 'Rational actions'.

When the genders were compared, controlling for the age groups, the differences became much more marked. For the most part the females produced significantly higher means than the males for nearly all the strategies particularly for the age group 16-35 year olds, i.e. for 'Palliative' response; 'Social support'; 'Depressive' and 'Emotive' responses. The only strategies in this age group where the males scored significantly higher means were for 'Rational actions' and 'Passive' response than the females. For the older age group 36-64+

year olds, the females produced significantly higher mean responses for the four strategies for coping with stress, namely 'Palliative' response, 'Social support' and 'Depressive and Emotive' responses.

The above findings do support the contention that females of all ages were better at using 'Social support' and the differences in the use of this coping strategy was based on straight gender lines (Etzion and Pines, 1981). But the earlier finding that the males were significantly more likely to use 'Passive' response needs modifying as it seems it was the younger males (16-35) who were responsible for this difference, in that it was they who were more likely to use coping strategies such as drink to deal with their stresses.

When the two age groups were compared, there was no significant difference between them for the number of 'days off sick' but with levels of efficiency ('presenteeism'), the younger age group 16-35 showed significantly lower levels than the older 36-64+ and this seems to have come from the younger females when compared with the older females. For the younger age group of 16-35 year olds there was little difference in the levels of stress between the genders and a small significant difference between them for 'days off sick'. Further there was no significant difference between the genders for this age group with respect to levels of presenteeism. However, when comparing the genders and controlling for the older age group of 36-64+, it was found that the males had significantly higher stress levels arising from most of the work factors yet the 'days off sick' did not correlate well with the work stress factors for the males in this age group, but they did for the females. The females in the age group 36-64+ also took significantly more 'days off sick' than the males. But on examining the data for presenteeism it was clear that the males of this age group experienced significantly lower levels of efficiency or presenteeism than the females.

From this can be seen again that blanket statements that women get sick more often than men, have limited validity (Pearlin and Schooler, 1978; Etzion and Pines, 1981) as age is a controlling factor i.e. this is only likely to be significantly true for the older 36-64+ year old females; and for presenteeism, only in the older age group of 36-64+ do the males perform at lower levels of efficiency/effectiveness than the females.

For coping strategies, generally for the younger age group of 16-35, 'Rational actions' and 'Depressive and Emotive' response correlated with 'days off sick' (negatively and positively respectively); the males were responsible mainly for the former, and the females for the latter. For the whole of the age group 36-64+ only 'Depressive and Emotive' responses

correlated with 'days of sick', the former mainly from the females (and 'Passive' response) and the latter from the males.

Also the statement that men employ more effective response repertoires for controlling stress (Pearlin and Schooler, 1978; Etzion and Pines, 1981) needs clarification, in that from this study this might only be true for the 16-35 year old males and would not be true for the 36-64+ year old males. But having more effective response repertoires would also seem true for the older females when compared to the younger females. However the finding that there was a correlation between 'days off sick' and the females' coping strategies of 'Depressive and Emotive' response is supported by a number of studies (Aneshensel et al, 1981; Cleary and Mechanic, 1983; Grove, 1979; Cooper and Davidson, 1982; Karasek et al, 1981; Haynes and Feinleib, 1980; Levenson et al, 1983). Rosenfield (1980) also suggested that working women experienced symptoms of depression significantly more often than males. In this study this would seem to be independent of age.

For all the subjects 'weekly alcohol intake' correlated only with 'Passive' response. The 'weekly alcohol intake' for the females also correlated with 'Social support' and with 'Depressive and Emotive' responses. This might be accounted for by the fact that just less than two thirds of the females in the study were married or living with someone (see appendix B5) and it seems that married woman are more vulnerable to having alcohol problems than the single females (Johnson, 1982). The above suggests that for the males, alcohol is associated with only one coping strategy but for the females it correlates with most of their negative coping strategies and also with 'Social support' one of their more positive coping strategies.

10.1.5 Professional status

From the above it became apparent that the experience of stress and the responses to it vary depending on the demographic variables, particularly gender and age. However, it has been suggested by a number of papers that another critical factor may be around locus of control. Many papers mentioned above suggested for example, that there were gender differences in the experience and reactions to stress. But Folkman and Lazarus (1980), found no gender differences. What they pointed out was that no differences were found when both genders were in similar environments. They suggested the gender differences were found because women more often held lower level positions with little opportunity to control their working lives. It was felt important to use the opportunity of this very large sample from a local authority employer to test how this might apply to the present study in that there was an

opportunity of comparing the genders in similar roles. Thus the data was examined for differences between a further two sub-groups i.e. whether the subjects was in a group classified as having a 'professional' status and those who could be seen as having a 'non-professional' status.

In this study it was found that the males experienced significantly higher stress levels than the females throughout the work stress factors, when they were 36-64+ and in the non-professional group. The gender differences did not really exist or were few, even when controlled for age, for those in professional posts (e.g. for managers, where there were no differences, or for teachers where there were only a few differences between the genders), even though the professional group experienced significantly more stress than the non-professionals. For 'Total work stress', there were no gender differences within any of the age groups, whether examined within the professional or the non-professional groups.

With respect to age and professional status, the older professional males experienced the most stress compared with the younger males. Amongst the professional females (comparing females subjects only) and the non-professional males (comparing male subjects only) there were no age differences. But the younger non-professional females did show significantly higher stress levels for 'Total work stress' than the older non-professional females. This would tend to lend support in part to the findings of Folkman and Lazarus, in that amongst the professionals there were no gender differences but there were differences with respect to age for the professional males and for the non-professionals females.

The overall gender difference in levels of stress was really due to a specific group of non-professionals i.e. the older 35-64+ age group of the non-professionals. Here it was found that the males experienced significantly more stress than the females in this group and showed lower levels of presenteeism. But the females showed significantly higher sickness levels, though this applied to both of the age groups of non-professional females. Further, the younger non-professional females did show significantly higher stress levels for 'Total work stress' than the older non-professional females. This might suggest that the non-professional older males and the younger females may feel they have less control over their work (Payne and Hartley, 1987) and this may lead to the higher stress (French and Caplan, 1970, 1972; Buck, 1972; Margolis et al, 1974; Spector, 1986; Karasek, 1979 and Rees and Cooper, 1992a; Payne and Hartley, 1987). Rees and Cooper (1992a) found that staff who believed themselves to have a good measure of control over many aspects of their work situation reported less work stress and used more coping strategies. They also found that

stress was not the domain of managers but can occur for any staff at any level who do not feel that they have any control of their work (Rees and Cooper, 1992b). It is perhaps understandable the younger females felt less in control of their work than the older females, but why not the younger males? What makes the older males in the non-professional group feel this more than the females? Perhaps the older males may have felt at their age they should be more in control of their work and thus feel the stress of not experiencing this. Some have suggested this might be because stress is not only a function of a situation but also of the individuals intelligence, experience, education, beliefs in their ability to control the situation and coping strategies or self-efficacy (Payne and Hartley, 1987; Bandura, 1977; Payne and Fletcher, 1983; Cox, 1985; Karasek and Theorelli, 1990; French et al, 1982). It was seen that what was important was how the issue of control at work varied with coping skills that would affect the experience of work stress (Sells, 1970; Cox, 1978). Greater job satisfaction and higher self-esteem are engendered when employees feel they are participating in decision-making, planning their work, controlling their work-loads and are empowered to decide how the work should be tackled; and non participation in these aspects relate to work stress and sickness levels. (French and Caplan, 1970, 1972; Buck, 1972; Margolis et al, 1974; Specter, 1986; Cox, 1990; Warr, 1992). This might explain the non-professional males' responses, but does not in itself explain why the professionals irrespective of gender felt more stressed, unless, within this organisation they did not feel as in control as they might feel they should be, given their roles. In support of this idea, Neufeld and Paterson (1989) suggest that control can be a double-edged sword in that demands created by choices in controlling situations can themselves be sources of stress. With respect to the correlations between the various work stress factors and 'weekly alcohol intake' it would seem the greater frequency of correlations occurred for the females, particularly the non-professional females aged 36-64+ who were living together with someone. This would partially lend support to the findings of Johnson (1982) who found married employed women had higher rates of problem drinking than single women. But these findings suggest that this may only be valid for the above specific group of women and not married employed women per se.

There was little difference between the age groups and professional status of the respondents in their methods of coping with stress. Here the critical differences seem to be gender specific in that the females were more likely than the males to use 'Palliative, Depressive and Emotive' responses and 'Social support'. There was generally no gender differences in the use of 'Rational actions' or 'Passive' response except that the younger 16-35 year old males amongst the non-professional group were more likely than the females within that

group, to use these last two coping strategies as a way of dealing with their stresses. Controlling for age group (36-64+) and specific professional groups (e.g. managers and teachers), the results generally supported the overall results particularly for the teachers, but not for the managers where there were no significant differences between the way the genders coped with stress for any of the coping strategies.

Comparing professionals with non-professionals, the professionals were more likely to use 'Rational actions', 'Social support' and 'Depressive' response (mostly the females). However, with respect to 'days off sick' more of the coping strategies correlated with this variable for the non-professionals, especially the females, this also applied to the correlations between coping strategies and 'weekly alcohol intake'.

These findings would lend support to the suggestions that females tend to respond to stress using socialisation and depressive responses more than males (Pearlin and Schooler, 1978; Etzion and Pines, 1981; Rosenfield, 1980). However, socialisation is seen as a positive coping strategy allowing for a deflection of focus from the working environment and gaining better work/life balance and, as depressive response is a reaction to feelings of not being in control, feeling powerless, then this may reflect certain social/cultural gender issues with respect to how females feel in the working environment/society generally even when in professional roles.

10.1.6 Summary

Males appeared to experience more stress than the females, except for stress from the factor 'Home/work interface' where there were no differences. However, gender differences with respect to work stress varied depending on the sub-groups being examined. Those who were non-professional, 36-64+ year old males experienced significantly more stress than the equivalent females; but amongst the professional group of subjects there were no gender difference irrespective of age. However, professionals experience significantly more stress than the non-professionals. Older professional males experience more stress than younger professional males. There were no age differences between professional females. Younger non-professional females were more stress than older non-professional females.

The females cope better using strategies such as 'Palliative' response, e.g. hobbies and pastimes; or using 'Social support' (seeing friends etc), but also being emotional or depressive (feeling powerless, not in control). When the coping strategies were broken down into gender and age groupings, it was found that it was the older females who were

responsible for that age group being high for 'Rational' response and 'Social support' when compared with the younger 16-35 year old females; while the older males responded with the 'Depressive' response. The younger males scored higher means for 'Passive' response and younger females, similarly, for 'Depressive' and 'Emotive' responses.

The women of the sample (particularly those in the age group 36-64+) estimated that they took more sick leave than the men and so they cost the organisation more in sickness costs. This also applied to the non-professional females of all ages. But the cost of presenteeism was higher in the men, costing the organisation significantly more than the women. Thus the 'Total work stress' for the men cost the organisation significantly more than the stress costs for the females. However, the differences in the costs for sickness for both genders were not significant. The professional group cost the organisation significantly more for sickness, presenteeism and hence for 'Total work stress' than the non-professionals.

It should also perhaps be pointed out because of the success of the 'Well-being' in producing so much data as a result of the high response rate and by breaking down the analysis of the data into the various work stress factors allowed the organisation to form focus groups for their various departments to look at the particular forms of stress that their sectors were experiencing and to allow then the organisation to target change around those particular stress factors. Arising out of this, the stage 1 'Well-being' study, it was found that the teachers had particular needs and thus apparently as a direct result of this study the charity 'Teachers' Support Network' was set up nationwide and was given counselling support by the original EAP provider as mentioned in this report (from information provided by the director of the Teachers' Support Network' and the EAP external provider {Nash, 2006}).

10.1.7 Conclusions

All the above illustrates that stress at work involves various factors which act differently on different groups depending on the variables e.g. gender, age, or professional status. These results tend also to show that the coping strategies for dealing with stress were more affected by the gender of the respondent than the other demographic variables examined. Thus this part of the study illustrates the complexity of the concept of stress and the coping strategies to deal with it, and how demographic variables can influence this. It can be said that the complexity is like the causes of congestion in a large city. This can be caused by the volume of cars (factors intrinsic in the job), the freedom to use various modes e.g. bus, train etc (managerial role), the variations in the efficiency of the lights controlling it, the number of

road works (organisational structure and climate), width of the roads (career and achievement), size of cars (relationships with others), the time of the day (home/work interface), etc. We can cope with it by not driving at peak times (rational actions), use a bicycle or walk (palliative), drive with friends and use time for talking (social support), not go anywhere (depressive response); shouting at other drivers, using road rage (emotive response) or to just sit there and wait it out (passive response). This can be controlled by congestion charges (lowering the stress levels organisationally), different driving habits (changing gender/age habits), e.g. not using cars (learning new coping methods), using better navigation methods, learning better coping strategies e.g. avoidance of peak times, using rat runs – these can be changed by asking for help to find the different ways to deal with the need to travel (via counselling). Thus changing congestion in a city is not a simple process, many factors come into play to cause it and hence solutions must therefore involve changes at different levels, some organisational which the individual cannot do so much about, except making his/her views known (by elections), offering suggestions, becoming involved to change laws/practices (improving locus of control) etc. But s/he can alter the methods used to deal with their experience of the problem through seeking help to analyse the problems and hence look for ways to deal with the problems more easily (e.g. via counselling). The question remains in what ways counselling alters/improves the levels of stress, mental health, work or personal functioning by changing the coping strategies and if change is promoted then how stable is this change over time. The next section will endeavour to examine this.

10.2 Demographic findings of the counselling study (stage 2)

10.2.1 Discussion

Compared with the proportion of each gender in the baseline sample, those who came for counselling were fairly representative of the organisation as a whole. The proportion of those who answered a questionnaire, within each age group was also fairly similarly to the proportion of the overall number who was offered counselling. These findings would seem to be in disagreement with other findings which found that women believed in counselling more than men and hence would utilise the service more (Googins and Kurtz, 1981; Hall et al, 1991; Harlow, 1998; French et al, 1997). But these findings do agree with those who found no gender differences or who said the role of gender cannot be assumed (Milne et al, 1994; West and Reynolds, 1995; Coudriet et al, 1987; Gerstein et al, 1993). Highley-Marchington and Cooper (1998) found women used external providers, three times more than men while there were no gender differences in utilization rates for internal providers. The provider in this study was an external provider and there was no overall over representation by proportion of each gender as compared with the normative baseline, so the above findings were not replicated by this study.

In this study the proportion of males who came for counselling was not that different from the proportion of males in the baseline sample. This would also counter the view of French et al (1997) that more women than men would use the service. While this may appear to be true overall, the proportions within this sample seemed to suggest this view does not hold, though this was certainly true for the 16-35 year old age group where the males were well under-represented.

Hall et al (1991) and Harlow (1998) found that women more than men believed that EAPs were effective and were therefore more likely to use it. Here it was found that, certainly after follow-up period, the females seemed to be justified in thinking EAPs were effective but proportionally the men seemed to use the service almost as much as the females. This study departs, however, from Milne et al (1994) and West and Reynolds (1995) who suggested that there were no differences in attitudes to counselling with respect to age. Clearly, at least from the point of view of age and the baseline samples view concerning likelihood of them using the organisation's counselling service and other therapies, the responses varied considerably depending on the age group of the subjects. Further, the actual utilization rates were very much dependent on age.

The majority of the respondents fell in the 36-64+ age group, both for the males and the females. A higher proportion of those coming for counselling fell into this age group as compared with the baseline sample. This applied both to the males and females. Braun and Novak (1986) suggested non-users of EAP counselling were males and those who were over 50 years old and those who were highly stressed and in denial of their problems, self reliant and would think that using an EAP would look bad. This was not reflected in these findings in that both the older males and females were well represented, but the younger age group, particularly amongst the males, was under represented. Braun and Novak assumed the younger age group would be better represented. Milne et al (1994) and West and Reynolds (1995) suggested that there were no age differences in attitudes to counselling and hence it could be assumed, no differences in utilisation of counselling services. Yet this study seems to suggest that age was a relevant factor in the utilization rate in that the differences in usage became more marked when controlling for age. The age group 36-64+ in the baseline study indicated that there was a greater probability that they would use the organisation's counselling service. The age group 16-35 expressed a very low likelihood that they would use the organisation's counselling service, and generally the younger age group 16-35 suggested they would use the service significantly less than the older group 36-64+. Those coming for counselling certainly confirmed that preference. Yet it was the younger age groups who had significantly higher stress means for most of the factors.

As noted above the proportion of males using the counselling service fairly represented the population of males in the organisation and but the males were under represented amongst the non-professionals and amongst the lower age group of 16-35 year olds. In the baseline sample it was the younger 16-35 year old females who experience significantly more stress than the older 36-64+ year old females with respect to 'Relationships with others' and 'Career and achievement'. In the counselling sample the age group 16-35 was not well represented and those who came were mainly female. This group came with lower stress levels and were able by the follow-up stage to get their stress, on most factors, to the baseline mean level. This would agree with French et al (1997) who said job satisfaction was not related to utilisation. But they, along with Milne et al (1994) and West and Reynolds (1995), also said that other demographic variables were not seen as predictors of utilisation, which this study would not agreed with, in that gender, age and professional status, can be said to definitely affect utilisation and for that matter outcome as well. However, it would also seem that that regardless of need, the organisation was not as

effective in encouraging the younger age groups to use the counselling service. This would also suggest that these groups need to be targeted to encourage them to use services offered as Steffy et al (1986) found that individualised programmes with targeted participants was more effective than packaged worksite programmes.

Overall those coming for counselling seem to have significantly more days off sick than the baseline mean. This applied to both the females and the males. The findings from the baseline sample were that there was a significant difference between the levels of sickness for the males and females (females having significantly more days off sick, though this was really only true of the older 36-64+ females). For those coming for counselling there was no significant difference between the genders in their days off for sickness, nor was there when the genders were controlled for age. This would seem therefore to disagree with the findings that when stressed, the females would be sick more often than the males at least for the sample who came for counselling. (Pearlin and Schooler, 1978; Etzion and Pines, 1981).

There were significantly greater mean number of days sick from those who came to counselling in the age group 36-64+ than there were for that age group in the baseline sample. However, for the males there were no significant differences between the number of days off sick taken by those who came for counselling and for those in the baseline sample, when controlled for age. The females who came for counselling were mostly in the age groups 36-64+ but there was no significant difference in the number of days sick between the two age groups 16-35 and 36-64+ amongst the females.

Those in the professional group took very significantly more days off sick than the baseline sample. But for the non-professionals, only the females took significantly more days off sick than the baseline sample (the difficulty was that the non-professionals males were not well represented in the counselling group). However, there were no significant differences in the number of days off sick between genders within each professional status group and between professional status groups controlled for gender. The fact that the professionals were well over-represented for both genders in the counselling group as compared with the baseline study, suggests that they perceived themselves as being more stress than the non-professionals or at least more willing to do address the issues. A number of researchers felt that non-professionals, particularly the females, were more stressed as they have less control over their work and less empowered to decide how to tackle their work (French and Caplan, 1970; 1972; Buck, 1972; Margolis et al, 1974; Specter, 1986; Cox, 1990; Warr,

1992). This was not the finding of the baseline study in that the professionals were significantly more stressed. It was suggested earlier that the demands on the professionals, having choices with respect to how they might control their work environment can be a source of stress in itself (Neufeld and Paterson, 1989). But the levels of sickness did not reflect these differences in that when controlled for gender there were no differences within or between the professional groups coming for counselling (for the latter group, only the females could be compared).

On looking at levels of work efficiency ('presenteeism') for the whole counselling sample and for each of the genders, irrespective of the sub-groups they were in, this was significantly lower than the baseline means within each of the sub-groups, this perhaps is a reflection of the higher stress levels of the counselling sample as compared with the baseline sample.

When the genders were controlled for age groups and professional status, the males showed significantly lower levels of presenteeism than the females for the counselling sample as a whole; for age group 36-64+ and the professional group in their levels of presenteeism. Also those in the professional group showed significantly lower levels of presenteeism than the non-professional group as a whole. The main differences seem to be between the males and females, particularly within the 36-64+ year olds and those in the professional group. This would suggest that when other variables were controlled, that there were some gender differences with respect to ways of dealing with stress as suggested by Gove and Geeken (1977).

When the costs for sickness and presenteeism were examined the results showed a varied picture. For the total counselling sample the mean cost of work-stress sickness was found to be £376 (£530) per year, compared with the £140 work-stress sickness costs found for the baseline sample. For the males the work-stress sickness costs equalled £293 (£392) and for the females £407 (£545). The differences were all significant when compared with the baseline mean. This would suggest that if the counselling could reduce this cost by more than the estimated annual cost per head for counselling (previously estimated at £33 (£44) per head {Masi, 1984}), then the service can be said to be cost effective. (The first figures are those at the 1996 cost calculations – when the study was carried out, the figures in the brackets are the converted figure to 2008 cost levels by multiplying the figures by 33.90% this being the inflation rate from July, 96 to December, 2008– {InflationData.com}). It is also suggested that the above figures for the costs of sickness and presenteeism for this

sample and the comparisons with the baseline sample, are based on more realistic figures (the respondent's real salary) than many other estimates quoted in the literature (e.g. The Mental Health Foundation, 2005).

Though the females of the counselling sample took more days off in the last year than the males, the difference was not significant. This also applied to the costs for that sickness. However there were differences in the levels for effectiveness/efficiency in that it was the males who were working to lower levels of efficiency, thus the costs for presenteeism were significantly higher for the males than the females (as the males were being paid significantly more). Therefore the costs relating to total stress were significantly higher for the males when compared to the females. This applied particularly to the professionals. So although as Etzion and Pines (1981) suggested that females get sick more often than the males, the males seem to have responded to stress with lower vitality/effectiveness i.e. lower presenteeism (Pearlin and Schooler, 1978; Quick and Quick, 1984).

Age groups 16-35 and 36-64+ showed no significant differences in the cost of sickness, but the older age group showed significantly higher costs for presenteeism and hence total stress costs when compared with the 16-35 year olds for all the subjects and for the males, but there were no significant differences for both variables for the females of this age group as compared with the 16-35 year olds. This was no different from the findings from the baseline study. But the above finding that females get sick more often than males and males perform at lower levels for presenteeism, would, as suggested from the baseline study, really only applied to the 36-64+ year olds.

For the professional status groups, for the 'sick costs', there was no significant difference between those who were in the professional and those who were in the non-professional groups when all the subjects who came for counselling, were examined together. But the professionals showed significantly higher costs for presenteeism and 'Total stress' than the non-professionals coming for counselling. The same applied to the males and females separately. The weekly alcohol intake of the counselling subjects was significantly higher than that of the baseline sample as a whole and for the females counselling subjects in particular.

10.2.2 Summary

Thus those who came for counselling were fairly representative of the organisation as a whole, with respect to gender, but tended to be aged 36-64+ and to be from the professional group. They drank significantly more than the norm.

Overall those coming for counselling seem to have taken significantly more days off sick. This applied to both the females and the males. However, contrary to the findings from the baseline sample where there was a significant difference between the levels of sickness for the males and females (females having significantly more days off sick), for those coming for counselling there was no significant difference between the genders in their days off for sickness, nor was there when the genders were controlled for age. The number of days off sick seemed to be a good predictor of whether a subject would ask for counselling.

The counselling subjects had significantly higher sickness costs than the baseline sample, lower levels of presenteeism, and hence higher costs for presenteeism and total stress costs. The higher sickness level was mostly from the females, aged 36-64+ and from either of the professional status groups. But when controlled for age i.e. within the 36-64+ age group, the males cost significantly more for sickness and presenteeism than the females amongst the counselling group.

10.3 Counselling study: Discussion on findings concerning variables measured.

10.3.1 Introduction

This study produced a variety of interesting outcomes such that it was quite difficult to work out how to discuss these issues in a coherent way. The core investigation was concerned with whether the brief therapy as offered by an employee assistance programme was effective in producing change and whether it was cost effective. Several main variables were examined for change through the three stages of the counselling study that were presented, these were the measurement of work stress via the six work stress factors and the mean sum of that stress; the mental health, work and personal functioning measures; and the measures which examined six forms of coping strategies with which to manage that work stress. However, as the data was examined it became clear that certain demographic variables interacted to give in some instances very differing results, namely the gender, age and professional status of the subjects, and these variables had to some degree some interactional effects. Thus it is proposed that these results will be discussed firstly by looking at the overall results of the group of subjects as a whole and to discuss the findings in the separate sections as the results were produced under the different chapter headings. Thus firstly the issues arising out of the work stress factors changes will be discussed. This will be followed by a similar discussion for the subjects as a whole, to examine the results for the variables mental health, work and personal functioning, finally all these findings will be brought together and compared with the findings for the various coping strategies. Within each of these sections following the discussion on the general findings, the gender, age and professional status findings will be also be discuss.

But firstly, it is important, as with any study, to raise the question of attrition. Kazdin (1994) indicated that anything up to 50% of the client's who begin treatment may drop out (though in this case, it cannot be assumed that because they do so, they have not benefited from the counselling process!). In this study, of those who began counselling during the period of the research 79% returned pre-treatment forms, 58% of those returned post-treatment forms and 29% returned the follow-up questionnaires. Some subjects did not return the post-treatment questionnaire (perhaps because they were not given it), but did return a follow-up questionnaire. This did raise the question whether there were any characteristic differences in the pre-treatment mean scores between those who filled out all

the questionnaires or at least one of the post-treatment or follow-up questionnaires and those who only filled out the pre-treatment questionnaire. This study, as with a previous similar study (Worrall, 1999), found that there were no significant differences in the pre-treatment means for any of the groups, whether treated as all the subjects together, or the genders separately. The level of attrition was within the expected range and there did not appear to be any characteristics which separated the non-respondents of later questionnaires with the responders, when their pre-treatment questionnaires were examined. There was also no significant difference in the pre-treatment scores between those who filled out the post-treatment questionnaire and those who only filled out the follow-up questionnaire, indicating that the fact that this happen, was not likely to occur because of the differences between the two groups of subjects, but may have occurred as a result of some subjects not having received a questionnaire immediately after therapy maybe because the therapist forgot or the organisation's administration forgot to send out the papers to the clients if they did not attend their last session.

10.3.2 Work stress - all subjects

For all the subjects taken as a whole, the findings showed firstly that the means for all those coming for counselling for each of the work stress factors were significantly higher than the means for each work stress factor of the baseline sample group. The results also showed that by the end of the counselling process the means had dropped but none had dropped sufficiently by that stage such that the mean was no-longer significantly higher than the baseline mean, i.e. had become part of the normative population. However, by the follow-up stage the reduction in the mean work stress levels for factors 'Factors intrinsic to the job'; 'Career and achievement' and 'Total work stress' continued to be reduced such that at that stage the mean was no-longer significantly higher than the baseline mean, meaning for these factors the counselling had reduced the stress such that the mean was at a level that made it fall within the baseline normative population. Further, for most of the factors the change as a result of the counselling was significant, and for about 30-40% of the subjects who came to counselling with levels of stress for the particular work stress factor that was significantly higher than the baseline norm, that change was clinically significant and reliable. The exceptions were for 'Relationships with others' where the mean change was not significant at any stage (but where 40.0% achieved clinically significant change) and for 'Managerial role' where by the follow-up stage the change was no longer significant. The difference for both these factors was that the means at the follow-up stage rose again. For the factor 'Home/work interface' and 'Organisational structure and climate', the changes as a result of the counselling were very significant, and

particularly for 'Home/work interface'. The effect sizes for the changes at the follow-up stage were above average for 'Home/work interface'. But the mean levels of stress for both these factors at the pre-treatment stage were so much higher than the baseline norm that even though the change as a result of the counselling was significant the mean was not sufficiently reduced to such a level that by the follow-up stage it was no-longer significantly higher than the baseline norm.

But, as has been mentioned before, in this study statistical difference can be achieved between pre- and post-therapy via a small degree of change if that change was experienced by most clients. This was seen as being unlikely to be of value either to the client or to the practitioner (Mullin et al, 2006). Thus the concept of clinically significant change was used as well. This is a concept widely used within psychotherapy studies for the measure of clinically meaningful client change (Jacobson et al, 1984, 1986; Jacobson and Revenstorf, 1988; Jacobson and Truax, 1991). Jacobson and Traux (1991) define clinically significant improvement as clients entering therapy as part of a dysfunctional population and by the end of therapy they are no-longer part of that population or are part of the normative population. Thus, for the two factors 'Organisational structure and climate' and 'Home/work interface' 40.9% and 40.7% respectively achieved clinically significant changes, giving 40.0% achieving this for the 'Total work stress'. So for the two separate factors and the 'Total work stress' the counselling was very effective in reducing stress but not effective enough because the stress levels for these factors for this group of subjects were very high. However, what this does suggest is that 'Organisational structure and climate' and 'Home/work interface' were the main factors that created work stress in this group of subjects overall. What will need to be discussed below is how the various work stress factors and in particular these two separate factors and hence the total work stress was affected by the gender, age or professional status of the subjects.

Overall though, this study showed that the counselling process improved the levels of stress for most of the various work stress factors and thus for the 'Total work stress' at least by the follow-up stage. Reynolds (1997) suggested 80% of the subjects showed significant improvement after counselling but no increase in job satisfaction. Cooper et al (1990) also found no change in job satisfaction. They found no difference between pre- and post-treatment scores in job satisfaction and this did not alter in the follow-up, though Worrall (1999) did find significant difference in work functioning, though the question that needs to be raised is whether this equates to job satisfaction.

This study suggests that firstly, job satisfaction needs breaking down into the various stress factors examined in this study, because it has shown that change depends on the factor being examined. Also, most authors examining job satisfaction do not comment on age/gender differences in responses. Bunce (1997) noted that many studies in this field showed scant regard to factors which might influence outcomes such as age and gender. It was suggested by Jick and Miz (1985) and Kiev and Kohn (1979) that many studies could not examine gender differences at work as the data was statistically unsuitable for such analysis. One reason suggested for this difficulty was that many organisations examined workers at the same level tended to heavily to be either males or females but not mixed (Israeli, 1979), and in many cases although 40% of the work force would be female, most of these would hold clerical jobs. However, while nearly 75% of the organisation involved in this study were female, 75% of both genders who came for counselling were in the professional group, and the proportions of either gender within each of these professional status groups were also very consistent with the proportion of each gender within the organisation as a whole within the groups examined (just about a quarter were males – though amongst the non-professionals, the males were under represented amongst those who came for counselling).

10.3.3 Work stress - gender differences

As was seen above the proportion of males who came for counselling was fairly equivalent to the proportion of males who responded to the baseline questionnaire (stage 1) and to the proportion of each gender in the organisation as a whole. Thus this would tend to concur with those who found no gender differences with respect to utilization rates for EAP provided counselling services (Gerstein et al, 1993; Milne et al, 1994; West and Reynolds, 1995) and disagrees with French et al (1997) who found more woman than men by proportion would use an EAP service; and with Hallet al (1991) and Harlow (1998) who found that women believed more than men that EAP's were effective so would tend to use the service more proportionately. But many studies grouped subjects altogether as it was considered that the samples were often statistically unsuitable to investigate sex differences (Jick and Miz, 1985; Kiev and Kohn, 1979). Yet gender was seen as affecting how people experienced stress and the coping strategies used to deal with those stresses (Beehr and Schuler, 1980; Ivancevich and Matteson, 1980). These differences were seen in the baseline 'Well-being' study. This study has allowed for gender comparisons as grouping all the subjects together can hide very important and relevant differences between various groups especially the very radical response differences between the genders. It would seem

many studies on the effectiveness of therapy seem to have ignored this issue (Bunce, 1997).

In the baseline data it was found that the males as a whole experienced significantly more stress than the females particularly for 'Career and achievement' and 'Organisational structure and climate'. Amongst those who came for counselling the males came with significantly higher stress levels than the females only for factor 'Career and achievement'. Overall the males gained much in reducing their stress to the post-treatment stage but lost most of the benefits of the counselling, with respect to changes in work stress, by the follow-up stage. It would seem that, altogether, the females were able not only to achieve significant improvements in their stress levels, through counselling, but seemed to be able, in most factors, to hold onto this improvement and benefit from the 6 month consolidation period to improve even more. The males were not able to do this, it seems, in most of the factors for stress. This would tend to agree with Beehr and Schuler (1980) who saw gender as a moderator with respect to stress responses. However, it was suggested that this was because the men were said to possess better psychological attributes or employ more effective methods of responding for controlling stress (Folman and Lasarus, 1980; Karasek et al, 1981). Yet this study shows something different such as males finding it hard to maintain the changes in their responses to stress and that over time the females found it easier to continue to reduce their levels of stress.

Firth and Shapiro (1986) found 60% of clients improved significantly on work related factors. It is hard to compare that study with this one, as the percentage improvement depended on the factor, the age/gender of the subject and whether the measure was at the post-treatment stage or at follow-up. For example the males showed 67.9% improvement for 'Factors intrinsic to the job' at post-treatment, but this dropped to 25% at follow-up and 57.1% achieved clinically significant and reliable change at the post-treatment stage but this drops again to 20% by the follow-up stage. The best improvements all round with respect to gender, were for 'Organisation structure and climate', where 37.3% of the females produced clinically significant change compared with 40.0% of the males at the post-treatment stage but by the follow-up stage for the females this rose to 50.1% while for the males this dropped to 33.3%. The gender differences were even more notable for the work stress factor 'Home/work interface' where 39.3% of the females achieved clinically significant change compared with 56.3% of the males at the post-treatment stage but by the follow-up stage this had changed to 43.4% and 33.3% respectively. Further, the females also did not produce a good mean effect size for their change at post-treatment but

produced a very good effect size for this factor at follow-up. Overall therefore both genders benefited from the counselling for this stress factor but to varying degrees in that particularly for this factor the females seemed to continue to improve (i.e. reduce) their stress for this factor over the post-treatment period up to six months after treatment, whereas the males became worse over this period. It is interesting to note that Cooper et al (1990) found a reduction in organisational commitment after counselling as if this was a negative issue. This study's findings might suggest that both genders were benefiting by getting better work/life balance and this may imply a reduction in organisational commitment, but less stress for the factor 'Home/work interface' (i.e. increase in commitment to being at home) and this will have the consequence of a reduction in stress overall and hence possibly an improvement in work performance (Firth and Shapiro, 1986). But this could still be interpreted as a reduction in commitment as if that was the most important issue for an organisation. It was with 'Home/work interface' that some of the most significant changes occurred and hence more consistently high effect sizes for the change.

Thus this study has shown that gender really does affect the outcome, for example, it was seen that the males improved for many of the stress factor at post-treatment but lost the benefit at follow-up; whereas the females did not show significant improvement for many of the factors until follow-up.

10.3.4 Work stress - Age/Gender differences

When, for example, the 'Total work stress' was examined the improvement rates were over 60% for many groups, with 80.8% of the 36-64+ year old males achieving improvement at the post-treatment stage but by follow-up this had fallen to 45.5%, though the males as whole showed that 75% had improved at post-treatment and by follow-up this had only dropped to 50%. Whereas for the females the best improving percentage at least by the follow-up stage was found with the 36-64+ year old females where at the post-treatment stage 59.2% had improved but by the follow-up stage 63.2% had improved and 47.4% had achieved clinically significant and reliable change. This would seem to contradict the findings of Iwi et al (1998) who found no change with their measurement of stress. Also Highley and Cooper (1995) and Reynolds (1997) studies which showed no change in job satisfaction but in their study there was an over-representation of the younger work force (25-40), whereas in this study, those who came for counselling were mainly in the older age groups of 36-64+. The Sheffield studies (Barkham et al, 1999) findings would seem to agree with this study in that those studies did show improvements in stress, but the

Sheffield studies lacked control groups. This study suggested a way around this by using a reference group from the same population from which the clients were coming.

With respect to 'Home/work interface' stress factor in the baseline sample, overall, there was no significant difference between the genders and nor was there, when controlled for age, for the younger age groups. The differences appeared for the older age groups 36-64+. This did not apply to the counselling sample where there were no significant differences between the genders for any of the age groups with respect to pre-treatment stress for 'Home/work interface'.

Thus, with respect to work stress factors the effects of counselling on the sample were not only gender specific but also age specific, as has been suggested by Bunce (1997). In the baseline sample work stress rose with age, with the age group 36-64+ experiencing significantly more stress for most of the work stress factors than the younger age group 16-35 year olds (except for 'Organisational structure and climate' and 'Total work stress'). Further it was mainly the age group 36-64+ who came for counselling. This was contrary to those who, either found there was no age difference in the use of or attitude to counselling (Milne et al, 1994; West and Reynolds, 1995), or those who found non-users to be over-50 years old (Braun and Novak, 1986), though other studies have suggested the older age group may be more stressed as they fear losing their jobs more (Copper, 1978 and 1983; Robertson and Cooper, 1983; Sleeper, 1975). However, the increase in stress could equally be because they have more responsible jobs which might create more stress (see below).

10.3.5 Work stress - Professional status

From the above it can be seen that the experience of stress and the responses to it vary depending on the demographic variables, particularly gender and age. However, it has been suggested by a number of papers that a more critical factor may be around locus of control. Many papers have suggested that there were gender differences in the experience and reactions to stress (Buck, 1972; French and Caplan, 1970, 1972; Karasek, 1979; Margolis et al, 1974; Payne and Hartley, 1987; Rees and Cooper, 1992a; Spector, 1986). But Folkman and Lazarus (1980), found no gender differences. What they pointed out was that no differences were found when both genders were in similar environments. For this reason this data was examined for differences between a further two sub-groups i.e. whether the subjects was in a group classified as having a professional status and those who could be seen as having a non-professional status.

It was seen from the baseline sample, that the males experienced significantly higher stress levels than the females throughout the work stress factors, when they were 36-64+ year old and in the non-professional group. The gender differences did not really exist or were few, even when controlled for age, for those in professional posts (e.g. for managers, where there were no differences or for teachers there were only a few differences between the genders), even though the professional group experienced significantly more stress than the non-professionals. For 'Total work stress', there were no gender differences for either of the age groups, whether examined within the professional or non-professional groups. Further within each age group and within the professional group there were few significant gender differences, the exception, in the professional group, was that the 36-64+ males experienced significantly more stress than the comparative females for 'Relationship with others'. In sum, the baseline study found few differences when the genders were examined within comparable groups. Thus those findings would tend concur in part with Folkman and Lazarus (1980) who also found no genders differences when both genders were in similar environments.

The results from the counselling sample, showed that there were underlying the gender differences in responses even when controlled for professional status. All the professionals came with levels of stress for all the work stress factors which were significantly higher than those for the baseline sample, this applied to both the males and females separately too. But the professional males were only able to produce above average effect sizes for the change as a result of the counselling at the post-treatment stage for; 'Factors intrinsic to the job'; 'Relationship with others'; 'Home/work interface' and 'Total work stress', at the follow-up stage the effect size was very low. But the professional females were able to produce above average effect sizes for the change only at the follow-up stage, particularly for 'Factors-intrinsic to the job'; 'Home/work interface' and 'Total work stress'. The non-professionals were able to produce above average effect sizes for the change only at the follow-up stage, particularly for 'Factors-intrinsic to the job'; 'Organisational structure and climate' and 'Total work stress'. Gender comparisons could not be made within the non-professionals as the males in the group were under represented. Nevertheless the gender differences were consistent with the findings reported in earlier sections with respect to the degree of change i.e. how lasting it was, irrespective of the professional status. But the professional status affected where the change occurred.

As discussed above (section 10.1.5) some studies have suggested that the experience and responses to stress were a function not only of a situation but the belief the individual had in their ability to control the situation, individual intelligence, experience and education. This study seems to challenge this view in that although the findings within the baseline study were that the younger non-professional females were more stressed than the older females, for the males the reverse was true, i.e. the older non-professional males were more stressed than the younger non-professional males. Also if there is less stress with more locus of control then how was it that the non-professional females produced better mean effect sizes for the change for more work stress factors than the professional females by the follow-up stage, maybe they were able to learn to take more control of their work/life balance than the professional females who maybe felt they were unable to do?

These results would seem to reinforce the concept that there are underlying gender differences in responses even when controlled for professional status. Rees and Cooper (1992a) suggested those who have a good measure of control over their work should be less stressed and suggested that stress was not just a domain of the managers (Rees and Cooper, 1992b). However, for these subject groups, both the baseline and those coming for counselling, it was the professionals who experienced the most stress in all of the factors. It may be that in this type of organisation (i.e. a local authority) the control issue may have brought with it other problems where expectation of control brought the burden of responsibility and frustrations with respect to the limits of that control as suggested by Neufeld and Paterson (1989). It was suggested above that the experience and responses to stress were a function not only of a situation but the belief the individual had in their ability to control the situation, individual intelligence, experience and education. This study seems agree with this view with the finding within the baseline study where younger non-professional females were more stressed than the older non-professional females but would not agree with this view with respect to males where the reverse was true for the non-professional males. It also seems that the non-professional females were able to take more control by producing more effective change as a result of the counselling for more factors than the professional females by the follow-up stage.

10.3.6 Work stress - Cost effectiveness

The question that this study also chose to examine was not only whether the counselling was effective in reducing stress but also with respect to the provision of EAPs, was it cost effective? It was suggested that the total work stress costs were 42.6% of the costs of sickness summed with the costs of presenteeism (Kearns {1986} suggested that up to 60%

of all work absence is caused by stress-related disorders and of that 71% of the stress is seen as work related {Cooper and Davidson, 1982} thus equalling 42.6% of the cost of sickness). Thus for the baseline study it was calculated that the cost of stress for this organisation was £140 (or at 2008 rate = £187) per head. This was more than the CBI estimates (CBI Conference, 1992) up-dated to 2008 of £133. If as suggested by Jones et al (1988) that 40% of the work force were experiencing stress then it could be suggested that the cost of the stress to the organisation was in the region of £1.3 million at 2008 rates. It was calculated that the mean cost for the counselling client altogether was £504 per subject at 2008 rate for their stress but when the genders were examine separately it was found that the males cost £392 and the females £545 per head, at 2008 rates. The total of all the subjects (224 = number of subjects producing this figure) was costing the organisation £112,900 (males {60} = £23,500; females {164} = £89,400). It was proposed that at the time an EAP programme was costing approximately £33 per head per year (Masi, 1984). From the above findings by the follow-up stage the mean total work stress for all the subjects together had been reduced by 16.3% (taking the follow-up mean from the pre-treatment mean and dividing that figure by the pre-treatment mean); for the males the reduction was 1.9% and for the females the figure was 18.2%. Using the 2008 figures this would be the equivalent of a saving of £82.15p per head for the subjects as a whole or £7.45p per head for the males and £99.19p per head for the females. This would indicate that for the subjects as a whole the saving was 1.6:1 and for the females a saving of 1.8:1; but from the above figures the service to the males showed a loss of 80% of the cost for counselling and thus for the males the effects of the counselling by the follow-up stage would not seem to be cost effective if the measure used was only the resulting reduction in total stress after counselling.

However, another way to calculate the saving as a result of the counselling was to compute the change in levels of presenteeism which allows for direct calculations involving proportions of salary lost/gained in relationship to respondents' subjective ratings concerning their levels of work efficiency/effectiveness. The increase in presenteeism as a result of the counselling was found to be 6.69% by the follow-up stage. This would give a mean saving of £552 per head for the counselling subjects for the EAP in 2008 compared with the estimated cost of counselling at 2008 inflation rate of £44 per person (*approximate ratio of 12.5:1*). However, as with the costing of sickness, there were also gender differences in the costing of the changes in the levels of presenteeism. As the genders clearly responded differently it was important to cost the saving for each gender separately. It was calculated that the mean presenteeism was costing £9825 per

counselling male per year. The saving on the increase of presenteeism of 8.14% was that percentage of that total, i.e. £811 *at 2008 rate*. However, as there was a drop in the level of presenteeism at follow-up for the males, the change in the level to that stage was only 1.31%, which would give a saving of £129 {or approximate ratio of 3:1} per male per year. Thus the saving for all the males together coming for counselling (47) was £6,157 at 2008 cost levels for increasing presenteeism for the males, which would suggest that although from the sickness calculations it would appear that the counselling was not cost effective, from the calculations concerning presenteeism it would appear that for the males overall the EAP was good value.

The mean presenteeism cost for the females was calculated as £7,501 per counselling female, this would produce a saving on the increase of presenteeism of 7.74% that is, £581 at the post-treatment stage. However, as there was a small drop in the level of presenteeism at follow-up for the females, the change in the level to that stage was 7.38%, which would give a saving of £553 *or a saving ratio of 13:1* per female per year. Thus the saving for all the females together, coming for counselling, (155) would have been £85,715 for increasing presenteeism for the females, which would suggest that overall, for the females, the saving as a result of the counselling, was very good. Thus the saving for the changes in levels of presenteeism alone for the females makes the value of an EAP programme very cost effective.

Thus calculating the factors in this way would seem to suggest that for these subjects the counselling process was cost effective in reducing the 'Total work stress' and increasing the levels of presenteeism of the subjects as a whole. The saving as a result of the counselling was calculated for the sample as £15,800 for reduction in stress or £85,000 for the increase in the level of presenteeism at the 2008 cost levels. This was the saving from 3% of the work force using the service. Examined from this perspective the counselling was calculated as saving 6.6 times the cost of the counselling as a result of the increases in levels of presenteeism. These figures should be matched against those suggested by Albrecht (1979) who at the time simulated the cost of stress to a company with 200 employees and a turnover of \$60 million (£37 million). He concluded that the company losses due to stress would amount to \$3.5 million per annum (£2 million) (equivalent to £10,700 per head). This would include the huge costs to the employer for the days the employee has taken off and getting him/her back to work (Matteson and Ivancevich, 1987; Murphy, 1984). These calculations did not include estimates of the costs of the concept of 'presenteeism' in that occupational stress can cause a company to operate at a less than

efficient level, linked with high stress is communication breakdown, poor decision making and general loss of vitality/effectiveness (Quick and Quick, 1984). The equivalent cost for this group of worker was £8,619 per head (in 2008) which did not include calculations for the aforementioned other costs, this calculation was just the cost of lost work days through sickness due to stress and lost of performance due to lower functioning or presenteeism. Overall, Masi (1984) estimated that “EAPs average a 3:1 return on the dollar”, others give similar ratios of 2.7:1 (Klarreich et al, 1987) or 1.5: 1 (Bruhnsen, 1989) or 2:1 (Dainas and Marks, 2000) or at least 1:1 i.e. paying for itself (Blaze-Temple and Howat, 1997). Thus, a review 39 EAP cost evaluations published in 1990 gave cost-benefit ratios ranging from cost neutral to 7:1 (Csiernik, 2004). This study, as stated above, produced 16.3% reduction in stress which led to a calculation that the saving was in the region of 1.6:1. This compares well with the examples given. Other studies showed that there were some who have not reported savings with the use of EAPs e.g., McClellan’s (1989) evaluation of the Ohio State EAP found no reduction of health insurance costs, sickness or employee turnover. Masi and Goff’s (1987) evaluation of an employee counselling service program for the US Department of Health used three different evaluation methods (process, impact and outcome evaluation methods) and found reductions in costs in terms of sick leave, leave without pay, administrative leave and absence without leave. Feldman’s (1991) evaluation of the EAP for General Motors reported that the program saved the company \$37 million per year. The Paul Revere Life Insurance Company also reported making a saving of \$4.23 for every dollar spent on its EAP program (Intindola, 1991).

The difficulty with cost evaluation is that the majority (98%) in a survey of EAP directors in the USA believed that EAP produced moderate to high cost-savings but only 40% collected any cost saving data (Houts,1991). However, it is difficult to know how well the data for this study compares with other estimates of cost savings as it is difficult to know how each one was calculated and what had been included in those calculations. Further many of the studies assumed average wages and calculated the costs arising out of sickness levels, yet as was seen with respect to sickness levels that even for the baseline sample group different groups varied in their levels of sickness and hence the levels of cost, e.g. in the baseline sample the non-professional females took off significantly more sick leave than any other group. Also the effectiveness of psychological intervention can have differing effects on short-term and on long-term absenteeism (Saroja et al, 1999). Further, the difficulty with study comparisons is to measure like-for-like treatments. When comparing many studies it is not always clear what the type of interventions were used. This problem with respect to comparisons of treatments may account for some studies producing opposite effects. Thus, Macdonald,

Lothian and Wells (1997) found that while 69% EAP users report their quality of life had improved and 46% said their work performance had gone up, their sickness levels also rose as compared with a control group. In Alker's study (2000), using a small population, found that sickness absences increased post counselling. Reynolds (1997) found 80% showed significant improvement after counselling in depression scales but no changes in absenteeism or job satisfaction. Highley-Marchington and Cooper (1998) found that well-being improved in counselling group but there was no improvement or reduction in sickness absence/events as compared with the control group. It is perhaps well to consider that the sickness levels of those coming for counselling would tend to be higher than any control or normative group (i.e. as compared with the general population from which the counselling population were coming from) (McLeod, 2001 and 2007). Also, it could be suggested that just focussing on sick leave as an indicator of stress levels and the effectiveness of counselling to, for example, get people back to work, could be seen as a very crude way to measure stress. It does not take into account the concept of presenteeism where the worker may not take any time off sick but could be so stressed that his/her performance level or effectiveness/efficiency is very low producing much lower productivity. Further, as illustrate above, well-being can be improved but this does not necessarily relate to sickness levels if the worker does not take time off sick (Highley-Marchington and Cooper, 1998). This was why it was felt that the concept of presenteeism as used in this study, served to produce a much fully picture of the costs of stress. Ahn and Karris (1989) came close to recognising the importance of using the concept of presenteeism, via their term, '*% of job deterioration*' in their calculations for the effectiveness of an EAP where they considered that an EAP's success rate could be calculated using the number of clients x average salary x *% of job deterioration* x success rate of 80% = cost effectiveness. But this assumes equivalent distribution of salary rates and all problems are weighted the same, by not recognising difference, critical factor are lost. When using the concept of presenteeism as a measure of the cost effectiveness of the counselling it was found that the counselling produced a mean rise for the level of presenteeism by the follow-up stage six months after the counselling of just under 7%, giving a ratio between the saving and the cost of the service as being 12.5:1. Thus the ratio of savings as a result of the counselling process for the females ranged between 13:1 to 1.8:1 and for the males the savings ratio ranged between a loss of 1:5 and a saving of 3:1 (for the increase in presenteeism) and for the group as a whole the savings cost ratio ranged between 12.5:1 to 1.6:1 all at stage 4, the follow-up stage. However, there is a caveat to these calculations in that while the results show that the counselling was cost effective for the 3% of the work force who made use of the service what is not known is the actual costs of the service to an organisation as the price an organisation pays for

such a service would be the subject of negotiations and be commercially sensitive/confidential. The estimate cost of £44 per employee is seen as the cost to the organisation of buying such a service for all the employees but no EAP purchaser would pay that figure for all their employees, the contract at the most would be roughly on the assumption that a maximum of 10% of the employees would avail themselves of the service, though in this sample only 3% used the service. But the actual costs of the contract that provided this EAP service to this set of clients was not known to the researcher. The only estimate that could be made is that if an affiliate is being paid £50 per session in 2008 (the average going rate for counselling at present) and as found in this study, the average number of sessions was 5.08 then the counselling cost, excluding administration would be in the region of £254 per client treated. This would work out at a total cost of just under £56,900 for all the clients treated in this study (224) which is about half the calculated annual cost of stress of £112,900 for this group of subjects and is less than the savings made in the cost of stress just on the increase of levels of presenteeism for these subjects of £85,000.

But more importantly these results show very clearly how it would be important in examining such data to endeavour to look at the genders separately and to use several tools for recording the change, for example without the presenteeism measure the results would seem to show that providing males with counselling did not serve the organisation very well. However, what the above indicates is that the genders responded differently but overall the data would seem to indicate that the counselling was cost effective for both genders even though the results showed different sorts of changes for each of the genders. Unfortunately it is not easy to compare the gender cost differences as other studies which estimate the cost of stress do not break the data down into gender differences (e.g. Albrecht, 1979; Matteson and Ivancevich, 1987; Murphy, 1984;). But calculating the data in the way this study has done would seem to suggest that for these subjects the counselling process was cost effective in reducing the 'Total work stress' and increasing the levels of presenteeism of the subjects as a whole, but was even more beneficial for the females, certainly by the follow-up stage. Therefore it can be said that these findings suggest that the counselling process was cost effective to varying degrees irrespective of the way the saving was calculated.

10.3.7 Work stress - summary

To summarise, this study showed that the counselling process improved the levels of stress for most of the various stress factors and thus for the 'Total work stress' at least by the

follow-up stage. In the baseline data it was found that the males as a whole experienced significantly more stress than the females particularly for 'Career and achievement' and 'Organisational structure and climate'. Amongst those who came for counselling the males altogether came with significantly higher stress levels than the females only for factor 'Career and achievement', but the older 36-64+ year old males scored significantly higher mean stress than the same age group of females for all the stress factors except for 'Home/work interface' where there was no significant difference. Overall the males gained much in reducing their stress to the post-treatment stage but lost most of the benefits of the counselling with respect to changes in work stress by the follow-up stage. It would seem that, altogether, the females were able not only to achieve significant improvements in their work stress levels, through counselling, but seemed to be able, in most factors, to hold onto this improvement and benefit from at least the 6 month consolidation period to improve even more. The males were not able to do this, it seems, in most of the factors for stress. Thus gender seemed to be an important variable which affected the response outcome. When 'Home/work interface' was examined, though altogether there seemed to be no gender differences in response, when age differences were examined together with gender it was found that that the work stress factor 'Home/work interface' affected the females more than the males in the younger age group of 16-35 years of age, who were more likely to have younger children, and there were only no gender differences for the older age group 36-64+, many of whom were in the professional work status group. The professionals themselves were able only to produce good change at the follow-up stage for the factors 'Home/work interface' and 'Total work stress' but the non-professionals produced good effect sizes for their change at both post-treatment and the follow-up stages. All the above indicates the importance of examining the demographic differences in order to show and understand response differences.

These results underline that the critical variable was gender as there were still gender differences in responses even when controlled for age or professional status. Some studies have suggested that the experience and responses to stress were a function not only of a situation but the belief the individual had in their ability to control the situation, individual intelligence, experience and education. This study seems to challenge this view not only from the findings within the baseline study where younger non-professional females were more stressed than the older non-professional females and where the reverse was true for the non-professional males, but also the view seems to be questionable for the counselling sample in that it was the non-professional females who produced good change as a result of the counselling for more factors than the professional females by the follow-up stage.

With respect to cost effectiveness, these results show very clearly how it would be important in examining such data by looking at the genders separately and to use several tools for recording the change, for example, without the presenteeism measure the results would seem to show that providing males with counselling did not serve the organisation very well with respect to cost. However, what the above indicated was that the genders responded differently and overall the data would seem to show that the counselling was cost effective for both genders even though what changed depended on the gender being examined. Thus for these subjects the counselling process was cost effective in reducing the 'Total work stress' and increasing the levels of presenteeism of the subjects as a whole, but it was even more beneficial for the females, certainly by the follow-up stage. Therefore it can be said that these findings suggest that the counselling process was cost effective to varying degrees irrespective of the way the saving was calculated.

10.3.8 Mental Health, Work and Personal functioning - All subjects

The above dealt with what stressors affected the subjects most and what changes in those levels of stress the counselling brought about. But stress affects the mental health, work and personal function of the subjects. Thus these measures were introduced as representing the overall effects of this stress. Hence it was seen as important to explore in what ways the counselling brought about improvements in these measures. This will be important, for if the goal is to improve mental health, work and personal functioning, then it would help the counsellors to know what changes/improvements in which work stress factors will help the clients most.

The counselling treatment was effective in producing significant change for mental health for most of the groups of subjects. Though the sample came with a much lower mean mental health score at the beginning of therapy (37.03) than the norm used, the mean effect size for the change was 'good' to 'very good' for at least 60% of the subjects by the follow-up stage (depending on the level used for inclusion – here, for this figure, those included were the percentage with effect sizes of about .50 or better) (Andersen and Lambert, 1995). Cooper and Sadri (1991) and Firth and Shapiro (1986) both found 60% of clients had improved in mental health after counselling. But for the mental health measure, while the mean rose through the stages of the study and the change between stages was significant, the mean rarely reached a level where it was no longer significantly different from the norm. This suggests that while the mental health was improved significantly by the counselling, the counselling subjects still experienced significantly lower mental health

states even after counselling than the norm. However, looking at the proportion of subjects who did achieve clinically significant change (as defined by Mullin et al, 2006), it was found that a relatively higher proportion achieved this than for any of the other variables measured (56.5%) and 65.2% achieved reliable change (giving 50.0% who achieved clinically significant and reliable change). This compared well with Worrall (1999) who found that 46% had significantly changed with respect to their mental health. Thus, the significant rise of mental health as a result of the counselling was consistent with other findings where significant differences were found between the pre-post scores for mental health and which persisted to the follow-up stage as compared with control groups (Highley and Cooper, 1995; Highley-Marchington and Cooper, 1998;). However, it should be noted that the norm used for the comparison in the present study, was not from the population being examined, but from another local authority work force as measure by Worrall (1999). A problem here may lie with this issue, as with many measures of normative populations, it cannot be assumed that the normative measure for one population is valid for another population sample. However, the results were not so different from the study carried out by Worrall within a similar organisation. In that study the mean mental health moved from 42.2 to 60.1 at post-treatment, to 64.9 at follow-up (after 3 months) and in this study the mean mental health for all the subjects changed from 37.03 to 51.69 at post-treatment, to 59.90 at follow-up (after 6 months). It is interesting to note that, at least with respect to mental health, no subjects deteriorated in this study notwithstanding that in many studies 5-10% can be expected to deteriorate (Lambert and Ogles, 2004). Many other studies concurred that counselling produces significant positive change in, for example, mental health, depression, anxiety, etc (Goss and Mearns, 1997; Mitchie, 1996; Parry et al, 1986; Reynolds, 1997; Sprang, 1992; Worrall, 1999), though Steenberger (1992) found poor results with respect to changes in depression. The Parry et al study found that those who were not offered counselling/psychotherapy deteriorated in their mental health during the same period that those receiving counselling had improved, though some of the studies suffered from not having control groups and it has been suggested that those improving may have improved without the help (Iwi et al, 1998).

The counselling treatment was also effective in producing significant change for work and personal functioning for most of the groups of subjects. For these two variables the mean levels were reduced such that they were no longer significantly higher than the norm. At post-treatment 66% had improved in their work functioning, immediately after counselling (with .67 mean effect size) but this dropped to 53% at the follow-up stage with a low mean effect size. With respect to personal functioning, 65% had improved immediately after

counselling (58% at follow-up) (with .78 mean effect size). This compares well with the 69% reported by Macdonald, Lothian and Wells (1997) where the subjects had felt that the quality of their lives had improve significantly as a result of EAP provided counselling, and in this present study, by the follow-up stage 40% achieved clinically significant change of the 34% who had come to counselling with levels for personal functioning which were significantly higher than the norm i.e. within the dysfunctional group and 65.7% achieved reliable change.

The issue concerning personal functioning may relate to the fact that the hope of most EAP counselling services would be that there was an improvement in work performance by increasing job satisfaction and hence mental health. Yet a number of studies into the effectiveness of EAP counselling found no correlation between improvements in mental health and job satisfaction (Cooper et al, 1990; Highley and Cooper, 1995a; Highley-Marchington and Cooper, 1998; Iwi et al, 1998; Kalleberg and Losocco, 1983, Quinn et al, 1974; Reynolds, 1997). Yet Worrall (1999) found significant changes in work functioning and in mental health and this study also found this. What this might suggest is that improvements in work functioning do not related necessarily to improvements in job satisfaction (or perhaps related personal functioning) or the measure use to rate job satisfaction was not measuring what it said it was measuring. From the point of view of the employers perhaps work functioning improvement is what is important and this is what EAP counselling, in this and other studies, seemed to promote. This might suggest that while subjects may improve in their work stress, functioning at work, and mental health through various strategies/coping mechanisms, they can still feel the job is insufficiently satisfying and they may have just found better ways of dealing with that dissatisfaction.

10.3.9 Mental health, Work and Personal functioning - Gender differences

In the discussion concerning work stress gender differences were found in the responses and the process of change through stages 3 and 4. Further as indicated above, the counselling treatment was effective in producing significant change for mental health, work and personal functioning for most of the groups of subjects. For work and personal functioning the mean levels were reduced to levels such that they were no longer significantly higher than the norm. However, what appears to be clear in this study is that for the various measures the responses to therapy were different depending on the group being studied. Worrall noted that for mental health, work and personal functioning there was a steady improvement through to the follow-up stage, but the subjects in that study were not examined for gender differences. In this study, for many of the measures used,

the males frequently lost much of the benefits by the follow-up stage that they had gained by the post-treatment stage. When comparing the genders for mental health and personal functioning there were no significant differences between the genders, at the pre-treatment stage. In other studies females have been found to have significantly poorer mental health than the males (Aneshensel et al, 1981; Cleary and Mechanic, 1983; Cooper and Davidson, 1982; Haynes and Feinleth, 1980; Karasek et al, 1981; Kessler and McRae, 1981; Rosenfield, 1980; Weinstein and Zappert, 1980). The issue may be that there was no difference with respect to levels of mental health between the genders for those coming for counselling, while there maybe a difference in mental health in the general population. However, by the post-treatment stage, the males had significantly better mental health than the females, but the difference was lost by the follow-up stage. In Worrall's study the mean effect size for mental health at post-treatment for all subjects was 1.04, where as in this study it was .89, but for the males on their own it was 1.05 and for the females it was .85. In addition, in the Worrall's study 59.4% of the subjects produced clinically significant change, whereas in this study the figure was 56.5% by the follow-up stage. However, when the genders were examined separately at the follow-up stage it was found that for the males the figure was 40.0% and for the females it was 61.1%. Thus it would appear that the effectiveness of the counselling in this study was not as good as that of the Worrall study when looking at the data as a whole. But when the subjects were separated into their respective genders the results would tend to show more improvement in comparison with the Worrall study, particularly when looking at the females on their own. What would affect the results of any study therefore would be the gender mix of the subjects. It is not known what the gender ratio was in the Worrall study so comparison is difficult as this study indicates that the gender mix would affect the findings of the mean results for the group as a whole.

When comparing the genders at the pre-treatment stage, for work functioning, the males showed they were performing at a level that was significantly worse than the females (scoring significantly higher means). But by the post-treatment and follow-up stages, work and personal functioning showed no significant differences with respect to gender. However, looking at, for example, the findings for work and personal functioning at post-treatment, in the Worrall study, the mean effect size for work functioning was .78 and in this study it was .68 for all the subject together, but for the males it was .80 and for the females .64; and for personal functioning in Worrall's study the mean was .89 whereas in this study the mean effect size was .79, but for the males it was .63 and for the females .84. What this indicates is that the effect of the counselling was gender dependent and the

overall results would therefore depend on the proportion of each within the sample, thus comparisons would be difficult to make without that data. Further this also showed that the effect size of the counselling differed depending on the gender. The males produced a higher mean effect size for change for work functioning, while the females showed higher effect size for personal functioning than the males.

Most of the females and their sub-groups reduced their mean levels for work functioning to levels that were no longer significantly higher than the norm, whereas for personal functioning it was for the males and their sub-groups where this occurred. However, as noted above, the males produced better effect sizes for work functioning than the females, whereas the reverse was true for personal functioning variable. This would suggest that the males had poorer work functioning levels at pre-treatment than the females and so had further to change to reach the norm than the females who needed therefore a smaller effect size to reach that state. Whereas for personal functioning the exact opposite was true, it was the females who had further to come to match the norm so had a larger mean effect size.

10.3.10 Mental health, Work and Personal functioning - Age/Gender differences

When examining the age groupings it was found with respect to mental health, the age group 16-35 year olds increased their mental health mean to that of the norm (by the follow-up stage) and that age group, at the post-treatment stage, produced significantly higher means than that of the 36-64+ year olds. Thus it was seen that the change (as measured by the effect size) for the age group 16-35 for mental health was significantly higher than that for the age group 36-64+. The same applied to the females when comparing these two age groups. The age group 16-35 year olds also improved their personal and work functioning to that of the norm by the post-treatment stage. For personal functioning there were no significant differences between the age/gender groups at any stage of the study. But at follow-up the 16-35 year olds males did have significantly lower means for work functioning than the 36-64+ year old males. These results seem to differ from those of Worrall (1999) who found that age was not significantly related to clinically significant improvement, but this maybe because the gender/age differences were not examined in that study.

This indicates the important of separating the sample into the various sub-groups if possible as behaviour and responses to change were seen in this study to vary and in some cases the effects can be in the opposite direction, thus if the subject groups were not

separated out their differing and opposite responses risk cancelling each other out if treated as only one sample group.

The above findings from this study indicate that while the counselling process did effect change, the degree and level of that change varied, as discovered by Howard et al (1993) and Stiles et al (1990), and the patterns of that change varied according to the characteristics of those clients and the contrasts shown above suggest that the responses to counselling vary depending at least on demographic variables. As suggested in other sections, little consideration has been given in many studies to the demographics of the subjects which, as shown by the different and sometime contrasting responses of, for example, the males and females, can confound the results if summed together.

10.3.1 Professional status – Mental health, Work and Personal functioning

With respect to professional status, the non-professionals had significantly higher mental health mean scores (as compared to the professionals) by the follow-up stage, and lower means for both work and personal functioning at the various stages of the study (for all the subjects – at the pre-treatment and follow-up stages; for the males – at pre- and post-treatment and for the females – at the follow-up stage). However, the professional females did produced a significantly higher mean effect size for the change for work functioning than the non-professional females at the post-treatment stage, though by the follow-up stage this difference was lost.

The reason the professional status was included was that it was indicated by some that a factor in levels of functioning at work and hence reactions to it e.g. mental health, may be related to the issue of the degree of control that a person has over their job (e.g. Folkman and Lazarus, 1980). As such it would be expected the non-professionals would have more difficulty in effecting change or control in their work, so would have lower mental health than the professionals, but this was not the case certainly by the follow-up stage and the non-professionals had lower means for work and personal functioning (dysfunctioning) by that stage too. Thus with respect to mental health both professional status groups produce good effect sizes at both the post-treatment stage and at follow-up and this was also true of the females as a whole, (there were not enough non-professional males at the follow-up stage to allow for valid analyses). At the post-treatment stage the professionals (all together and males and females separately) produced better effect size for the change for work functioning and personal functioning, but by the follow-up stage the non-professionals had produced significantly better effect sizes for the change than the

professionals. Jick and Mitz (1985) suggested that an individual's response to stress was a function in part of their gender which in turn may be determined their role status. But in this study when the roles were controlled (into professional status groups) the differences in effect size were much more to do with whether they were in the professional group than their gender at the post-treatment stage, or whether they were in the non-professional group at the follow-up stage. This suggests that gender was not the only controlling factor but also professional status, and irrespective of how much they would be expected to have more control over their work, the professionals produced much lower effect sizes for change for work and personal functioning than the non-professionals.

10.3.12 Mental health, Work and Personal functioning – summary

To summarise, the counselling through the EAP service produced, for the most part, significant change for work and personal functioning and for mental health, showing good to very good mean effect sizes for that change for most of the groups examined. But the effects were not uniform for all groups and the analyses showed that the effects varied depending on the gender, age and professional status of the subjects, and without separating out the groups the sometimes contrasting effects on such groups can mask the effects of the counselling. Thus the results from the counselling sample for these variables, showed again that there were underlying gender differences in responses even when controlled for professional status i.e. the gender differences were consistent with respect to the degree of change i.e. how long lasting the change was, irrespective of the professional status. But the professional status affected where the change occurred.

Further, it was felt that the variables of mental health, work and personal functioning as measured here, while showing that the counselling process did effect change in these variables, they were not sensitive enough to inform, for example, organisations, with respect to where they can be most effective in changing their employees responses within these variables or where counsellors might focus to maximise improvement in these variables. Thus from the above results it can be said that the counselling process was effective in producing significant change with respect to the three variables examined. It also seemed that poor work or personal functioning affected mental health or visa versa. The question concerning which affects what, was not clear, some studies have found work stress to be directly associated with a number of variables including mental health (Lerner et al, 1994); and other studies have reported that mental health affects work functioning and mental health interventions improve work performance (Firth and Shapiro, 1986; McDonnell Douglas Corporation EAP Audit, 1989; Mintz et al, 1992; Wells et al., 1989).

However, knowing that they are related or that counselling helps to significantly raise mental health or to reduce the levels of 'dysfunctioning' at work or in their personal life does not inform about what is it that changes and hence on what the counsellor should focus on, to make his/her work more affective, or where they can promote the most change and for whom. Dewe (1991) argued that it was necessary to go beyond asking what the demands at work were by asking about the various dimensions of these demands. Others suggest there is a need to examine the interaction between these demands and perceptions of these demands such locus of control and levels of support (Cox, 1985; ; Karasek, 1979; Karasek and Theorell, 1990; Payne and Fletcher, 1983; Warr, 1990;). Thus many studies have shown that EAP counselling benefit the clients in some way e.g. have helped to improve work performance (e.g. McClellan, 1989; Parks, 1992, Worrall, 1999). But just looking at the improvements in mental health or work and personal functioning can show symptom relief and changes in work performance but the results are not sensitive enough to show how the work functioning has improved or what has changed in social/life functioning that has an impact on the subject's mental health and hence work or personal functioning. Thus it was felt that looking at the detailed variables relating to work stress, as suggested by Cooper et al (1988) and for example the coping strategies, as suggested by Cox (1978) and Sells (1970) would address the complexity of the experience of stress in the work place. Asking a few questions to measure, for example, work functioning would tend to inform that the subject is or is not functioning well at work, but this would not indicate where the important sources of the stress lie and therefore make it difficult for the individual counsellor or the organisation to identify the sources of the stress more precisely and it would not make it easy to remedy the situation in a focussed way via organisational restructuring or through counselling.

However, the question this study wished to address was not that the counselling process was helpful in producing change per se but where the counsellors could focus their work in order to promote change within the above variables. The analyses of the work stress factors, mental health, work and personal functioning does not exactly allow for this. Thus, the need to look at the coping strategies of the subjects with the proposal that these would allow for more detailed analyses concerning the effects of the counselling process on changing/improving coping strategies.

10.3.13 Coping strategies - All subjects

Bunce (1997) noted that little regard had been taken of the factors that can influence the experience of stress and coping strategies such as gender and age of the subjects/clients, so

the focus of this study was to examine the differences in the effectiveness of the brief counselling process as provided by an employee assistance programme with reference to gender, age and professional status. Thus now the discussion will focus on comparing the results for the various coping strategies for each gender and the interaction between gender, age and professional status.

In all the previous discussed variables it was useful first to compare and contrast the differences between the baseline and the counselling samples' responses as a whole group and to examine the quality of the changes as a result of the counselling. Then it was seen as appropriate and important to examine the data with the focus being on gender differences in particular as this gave a rather different picture with respect to the results than that which looked at the data overall, i.e. for all the subjects together. However, when it came to examining the results with respect to the coping strategies, it was seen that there was no point in examining the data overall as more than for any of the other variables it became clear that the overriding variable that made for differences in responses was that of gender. Hence it was seen that the only way that would make sense was to explore the data for the coping strategies by comparing and contrasting the gender difference in responses.

10.3.14 Coping strategies - Gender differences

From the baseline sample it was found that men and women use different coping strategies to deal with stress. The baseline study results showed that the males used predominantly the more positive coping strategies of 'Rational actions' i.e. seeking solutions to their stress problems, or use 'Passive' responses, as generally men seek to try to find solutions to problems or cope passively by avoiding them hoping the problems will go away, i.e. have a drink and try to forget about it. The females showed a significant tendency to use more 'Palliative' methods of coping than the males, i.e. seek ways to alleviate the problem without dealing with it. Women also showed they would use their 'Social supports' more than men. Further the females would tend to react with depression or more emotively, like taking it out on a partner/spouse, more often than the males.

This pattern of responses was echoed in those coming for counselling, though those coming for counselling differed from the baseline sample population in some very clear ways. In the counselling sample, both genders came to counselling with significantly lower levels for 'Rational actions' than the baseline sample. With respect to coping strategy 'Rational actions' the males came with a significantly higher mean than the

females, at the pre-treatment stage. This suggests that for both the baseline and counselling samples the males were more likely to take positive actions to deal with their stress than the females. Lazarus (1966) has argued that the person usually employs both task and emotional focused coping strategies. The former attempts to form an action directly targeted towards dealing with the source of stress: adaptation of the environment, while the latter attempts to attenuate the emotional experience associated with that stress (Lazarus, 1966; Lazarus and Folkman, 1984). These results suggest that the males in both samples employed more task focused strategies for dealing with their stress.

Males and females were said by some to differ very little in the way they appraise potentially stressful events (Folkman and Lazarus, 1980; Karasek et al, 1981); but men were said to more often possess better psychological attributes or employ more effective methods of responding for controlling stress. Dewe (1987) examined sources of stress and strategies used to cope with them by ministers of religion in New Zealand and for this group of subjects, it was found that they viewed coping as a problem solving strategy. Although this study does not specify the gender, it could perhaps be assumed, as it was ministers in the church, that they would be predominantly male. This would seem to be confirmed by the findings at the pre-treatment stage in this study.

However, after counselling the gender differences disappeared. The males came with a mean level for the coping strategy of 'Rational actions' that was only just significantly different from the baseline norm and thus they showed no significant improvement, overall. The females came with a level that was significantly lower than the baseline mean but as a result of the counselling, of those who came as part of the dysfunctional group (i.e. levels that were more than one standard deviation from the baseline norm), 48.9% had produced clinically significant change at the post-treatment stage. But in contrast with other findings where the females continued to improve over the 6 months follow-up period; in the case of 'Rational actions' the proportion who achieved clinically significant change was 50% in contrast with the males where by the follow-up stage 75% had achieved this and at this stage there was an above average effect size for that change for the males. However, the change for the females was such that their mean for this coping strategy was no-longer significantly different from the males or the norm at both the post-treatment and follow-up stages. Thus the proposition can perhaps be challenged here, that men possess better psychological attributes or employ more effective methods of responding for controlling stress and that women were said to be socialized in a way that equips them less adequately for effective coping (Folkman and Lazarus, 1980; Karasek et

al, 1981). It may be that the females are socialised in a non-rational action responses to dealing with stress, but were certainly able to significantly change, as a result of the counselling, such that there were no-longer gender differences. So maybe the suggested socialisation was not so well engrained as previously proposed in that change was promoted for the females for the coping strategy of 'Rational actions', by the counselling process, and the change was at least maintained by the females up to the six month follow-up stage.

The changes for the females suggest that, irrespective of earlier findings concerning gender differences in styles of coping, that at least the females, can be trained to develop healthier coping strategies by, for example, learning time, stress and anger management, assertiveness training and developing better work/life balance. Murphy (1984) reinforced this saying that learning to manage stress was more effective where it was seen as part of health promotion, i.e. learning improvements in coping strategies, rather than specific stress reduction methods. But he suggested that healthy strategies for coping with stress only minimise stress when they are allowed to work. So for example, if an organisational structure does not provide sufficient autonomy for 'Rational action' to be functional, such as allowing the worker control over his/her working time, then the worker can feel more stressed and may opt for the less healthy coping strategies of say 'Depressive or Passive' responses. Rees and Cooper (1992a) suggested those who have a good measure of control over their work would be less stressed. Thus individual-orientated approaches to stress management, like counselling, will usually work more effectively if it is linked to changes in the organisational structure, such as flexible work hours, which the females would be more likely to demand, though both males and females, would benefit from such flexibility (Landsbergis, 1988).

In the 'Well-being' study the females were significantly more likely than the males to use 'Palliative' response e.g. using a hobby or pastime to deal with the stress, or as a way of distracting oneself with other activities. This can be view negatively or positively as a way of dealing with stress i.e. achieving better work/life balance, so taking the pressure off work to provide an individual's sense of self-value or worth, or use hobbies or pastimes to distract oneself with other activities, or seek ways to alleviate the problem without dealing with it (Hammond et al, 1992; Lazarus and Folkman, 1984). When comparing the results for the counselling sample there was no difference between the genders for their use of this coping strategy at any stage of the study. But while the females came to counselling with a mean score for 'Palliative' response that was significantly lower than the baseline mean,

the males came with a level that was higher than the baseline mean but not significantly so. This would suggest that the males coming for counselling tended to be healthier in this aspect than the males in the baseline mean sample, if it can be said that the use of 'Palliative' response was a way to achieve better work/life balance.

There were certain interesting issues involving the coping strategy of 'Social support'. Use of social support is seen as a positive coping strategy allowing for a deflection of focus from the working environment to the development of better work/life balance, by way of interacting with different groups of people who reflect for the individual a greater variety of his/her self-value or self-worth than one that is only focussed on their worth and value at work. Etzion and Pines (1981) and others have suggested that women tended to seek help and social support more effectively than men (Etzion and Pines, 1981; Jick and Miz, 1985; Pearlin and Schooler, 1978; Rees and Cooper, 1990; Rosenfield, 1980;). From experiences in the counselling setting it would seem to be apparent that females tend to be better at building and maintaining good life balance than the males. This was certainly the case in the findings from the baseline sample in that the females scored a significantly higher mean for the coping strategy of 'Social support' than the males.

However, while the females in both the baseline and the counselling samples had significantly higher means for the use of 'Social support' than the males; both genders came at the pre-treatment stage with significantly higher means for this coping strategy than the baseline mean and though improvements were seen through the different stages of the study, the subjects mean response level (irrespective of gender) stayed significantly higher than the baseline mean. This finding was somewhat surprising as it seems to indicate that for this coping strategy that those coming for counselling, both the males and females, scored significantly better means than the baseline sample and hence were healthier in their use of this response than the normative population. This coping strategy of using 'Social support' was helped by the counselling process for most groups examined and even though most came with levels significantly higher than the baseline means, they continued for the most part to improve on this level. Though the females who came for counselling had a mean score for 'Social support' which was significantly higher than the males at the pre-treatment stage, by the post-treatment and follow-up stage there was no longer a significant difference between the genders.

Thus, while the males came with a significantly higher mean for use of 'Social support' as a coping strategy than the baseline norm for the males; they seemed to have benefited the

most, bringing them on par with the females by the end of the counselling process. This is reflected by the above average effect sizes for the males for the changes at both the post-treatment and follow-up stages. This would suggest that at least for the coping strategy variable of the use of 'Social support', unlike most other variables, the males were able to benefit from the counselling to improve on this strategy and to continue to improve up to the follow-up stage. Thus, whereas, for 'Rational actions' the females were able to learn to bring their means up to that of the males such that there was no longer any significant differences between the genders, the reverse was true for 'Social support' where it was the males who gain most and had developed the skill and were able to reach a point at both the post-treatment and the follow-up stages where their means were no-longer significantly different from the females. It can perhaps be said that the counselling produced little effective change with respect to this coping strategy for the females as they were already better skilled with using this strategy than the males.

It should also be noted here, that the concept of clinically significant change was not useful as the mean for those coming to counselling was already higher than the norm and improvement meant that the mean became even more significantly higher than the baseline mean. But the concept of reliable change was still useful and here it was seen that by the follow-up stage 66.7% of the males and 70% of the females achieved this for this coping strategy. Further, it would seem that the greater the likelihood of using 'Social support' as a coping strategy, could be seen as a good tool with which to indicate the likelihood of someone from the normative baseline population being able to think about seeking help from counsellors. The question here was; how was it that those with higher 'Social support' levels than the norm would seek out counselling help? It could be suggested that counselling may be seen as an extension of their skills in using this strategy. This would tend to agree with those who said that brief therapy would tend to be successful where there is a history of successful social interactions (Burlingame and Fuhrman, 1987; Lambert et al, 1986; Steenbarger, 1992). This is to suggest that those who were poor in the use of this coping strategy were perhaps less likely to use counselling as means of dealing with their problems.

It should be borne in mind, with respect to the coping strategy of using 'Social support', that those coming for counselling, came with mean levels for this strategy that were significantly higher than the baseline norm and continued to improve on that through the counselling process, so the desired change would be for the mean not to drop to that of the baseline norm which was already significantly lower than the mean of the subjects at the

pre-treatment stage. This would concur with those who argued that good social relationships were essential for both individual and organisational health (Cooper, 1981; Sauter et al, 1992) and poor interpersonal supports would lead to poor mental health and greater work stress (Beehr and Newman, 1978; Davidson and Cooper, 1981; Pearse, 1977; Warr, 1992). Thus it was seen that poor mental health correlated with high means in most of the work stress factors and good mental health correlated with the good use of 'Rational actions' and 'Social support' i.e. higher mean scores for both (see appendix A21).

Within the baseline sample it was seen that the females were significantly more likely to use depressive responses as a coping strategy, such as bottling up feelings, and feel powerless to effect change or take control of one's situation. This is supported by many other findings that showed females were significantly much more likely to cope with stress with depressive responses than the males (Aneshesl et al, 1981; Cleary and Mechanic, 1983; Cooper and Davidson, 1982; Etzion and Pines, 1981; Gove, 1979; Haynes and Feinleth, 1980; Karasek et al, 1981; Levenson et al; 1983; Pearlin and Schooler, 1978; Rosenfield, 1980). However, this was not the case for the males in this counselling sample, for although the males came with higher levels for 'Depressive' response than the females the difference was not significant, and the differences were not significant at any of the stages of the study. Yet in other studies females were seen as having significantly poorer mental health than males (in addition to the above authors; Kessler and McRae, 1981; Weinstein and Zappert, 1980).

The question here is that there may not be differences between the genders, in depression or mental health of the counselling subjects but there maybe in the general population, or as found here, in the baseline sample. Not only this, but as found by many studies, including this one, improvements in mental health and 'Depressive' response correlated with improvements in work functioning and with most of the work stress factors (see appendix A21) (Firth and Shapiro, 1986; McDonnell Douglas Corporation EAP audit, 1989; Mintz et al, 1992; Wells et al, 1989; Worrall, 1999). However, like many of the other variables, there was a mean improvement for the males to post-treatment for 'Depressive' response but this was apparently lost by follow-up, whereas the females continued to improve to follow-up. This may be because, as suggested by others, males tend to use coping strategies which may be only effective in the short-term (looking for the quick fix – solution focussed {Jick and Miz, 1985}), and in fact this strategy, it has been suggested by Jick and Miz (1985), may be the cause of them being more prone to serious illness. However, it should also be pointed out that by the follow-up stage, the mean effect

size for the change was very good for the males at .73 with 75% showing improvement at some level and 33.3% showed clinically significant change, though 58.3% of the females produced this at this stage. Nevertheless, this certainly underlines the contention that gender is an important moderator with respect to coping responses to stress (Beehr and Schuler, 1980), but does not support the view that males possess better psychological attributes as suggested by Folman and Lasarus (1980) and Karasek et al (1981).

In the baseline sample the females were more likely to use 'Emotive' response than the males, for example, shouting at colleagues, spouse or family when upset and stressed. This was also the case at the pre-treatment and post-treatment stages, but at the follow-up stage there was no significant difference between the genders. The females started at a higher mean level for this response and while the males were also able to reduce their levels of responding with this coping strategy, the females benefit most from the counselling in reducing their mean level to that of the baseline population and to maintain and improve on that by the follow-up period. Here again was an example of the males improving a great deal at the post-treatment stage where 56.7% produce clinically significant change, but by the follow-up stage this dropped to 33.3%.

Many other findings have indicated that females have significantly poorer mental health than males (Aneshensel et al, 1981; Cleary and Mechanic, 1983; Cooper and Davidson, 1982; Haynes and Feinleth, 1980; Karasek et al, 1981; Kessler and McRae, 1981; Rosenfield, 1980; Weinstein and Zappert, 1980). These findings first would tend to confirm this, but they also show, with counselling, that the females had a capacity for significant change in their coping strategies both after counselling and to maintain or improve on that change at least six months later, e.g. with 'Rational actions', 'Depressive and 'Emotive' responses.

The opposite effect was found for the coping strategy of 'Passive' response, an example of which may be to have a drink and hope the problems will go away. The opposite effect was that, in both sample groups (the baseline and counselling samples), the males were significantly more likely than the females to cope using this response. In the baseline 'Well-being' sample, alcohol consumption for the males correlated very positively with 'Passive' response. For the counselling sample both males and females consumed significantly more alcohol than the matching group in the baseline sample. But in the counselling sample for the males, only 'Passive' response correlated also with alcohol consumption. For the females, alcohol consumption correlated with all the coping

strategies except 'Rational action' and 'Palliative' response. This would suggest that males' coping strategies also include non-focussed or non-constructive coping methods to deal with stress. Johnson (1982) noted that it was indeed an observation that males have higher rates of problem drinking, though he did also observe that married employed women had significantly higher rates of problem drinking than single working women.

Unfortunately while the males did improve with respect to 'Passive' response coping strategy at the post-treatment stage, with over 58% showing clinically significant change but this was hard to sustain through to the follow-up stage where this percentage dropped to 20%. For the females the proportion who achieved clinically significant change at both stages was about consistently around 43%, but as the females mean starting point was not significantly different from the baseline mean then it would not be expected that this percentage would be very high. Thus the counselling process was not particularly successful in promoting change at least to the follow-up stage, especially for the males for the coping strategy of 'Passive' response.

Thus to summarise, those coming for counselling, both the males and females were high in the use of 'Social supports' and 'Depressive' responses. The latter is maybe not surprising, and the former was maybe why they thought to use counselling as a means of dealing with their stresses. Nevertheless, the effectiveness of the counselling process varied.

The females were helped to improve their skills in responding with 'Rational actions' and were able to sustain the change at follow-up. They were also able to reduce the level in which they responded with 'Depressive, Emotive and Passive' responses and were also able to sustain this change or improve on it by the 6 months follow-up. Counselling did not seem to help to produce any significant change for the females for using 'Palliative' response or 'Social supports', although they were already high on these two coping strategies, so maybe much change would not be expected.

In contrast, the males seemed to have been helped less by the counselling process in that the only coping strategy where improvement was found and which was sustained at follow-up was that of 'Social support'. They were already higher than the norm for this strategy and were still able to benefit from the counselling in this. The males were also helped by counselling to lower their 'Depressive and Passive' responses but unfortunately this improvement did not seem to have been sustained by the follow-up stage. The males were not helped to increase their 'Rational action', as perhaps they were already high on

this strategy and there was little change in their level of coping using the 'Emotive' response, perhaps again because they were low in this response and not very different from the males in the baseline sample.

10.3.15 Coping strategies - Age differences

When the subjects were put into two main age groupings of 16-35 and 36-64+, the younger age group of 16-35 year old, came with levels for all the coping strategies that were significantly different from the baseline mean, except for 'Palliative response'. But the counselling only produced change by the follow-up stage such that the means were no longer significantly different from the baseline mean for 'Rational actions'; 'Depressive, Emotive and Passive' responses; and the change was only significant at the follow-up stage for this age group for coping strategies of 'Social support' and 'Depressive' response, and there was a good mean effect size for the change for this age group at the follow-up stage for 'Rational action'.

Whereas for the older 36-64+ age group the counselling produced significant change such that the mean was no longer significantly different from the baseline mean for the coping strategies of 'Rational actions', 'Palliative and Emotive' responses; and the change was also significant for 'Depressive response' and 'Social support'. There was no significant change for 'Passive' response but then this age group's mean level for this coping strategy was not significantly different from the baseline norm at the pre-treatment stage. The younger age group 16-35 came to the counselling with significantly higher mean levels than the 36-64+ age group for coping strategies of 'Emotive and Passive' responses and for this age group the counselling produced significantly greater effect sizes for the change in 'Rational actions' than the older 36-64+ age group.

What this suggests is that although the age group 36-64+ came with higher levels of stress than the younger age group of 16-35 year olds, the younger age group came with significantly poorer coping levels for 'Emotive and Passive' responses and that they were not able to produce significant change for these coping strategies as a result of the counselling. Thus it would seem that the older age group were able to effect more change than the younger age group. Though as indicated above the majority of the users of the counselling service were in the older 36-64+ age group. This suggests that the older group were less likely to respond to stress by shouting/arguing with colleagues/partners or family, or to try to drink their problems away. It should also be noted that the findings were also that 'weekly alcohol intake' correlated with 'Passive' response. This would

suggest that the younger age group were more likely to use drink, as an example of a passive response, to deal with their stresses, and were not able to change the likelihood of responding in this way as a result of the counselling. The fact that the older age group, as a group were able to produce significant change should be seen in the light that when people go to their GPs as gatekeepers for counselling services, the GPs see that those who are the most suitable for therapy were those who were in the younger age groups (Wright, 1992).

10.3.15 Coping strategies - Gender/age differences

With respect to coping strategies in the baseline sample, the 16-35 year old males were significantly more likely to respond to stress using 'Emotive and Passive' responses than the older 36-64+ year old males; and the younger females were significantly more likely to respond with 'Emotive' responses than the older 36-64+ year old females, who themselves were significantly more likely to respond with 'Rational actions' than the 16-35 year old females.

The 16-35 year old females were significantly more likely to respond to stress with 'Palliative' responses; 'Social support'; and 'Depressive and Emotive' responses when compared to the equivalent age group of males. For the males only the 16-35 year old males were significantly more likely to respond with 'Rational actions' and 'Passive' responses than the females aged 16-35 years. Thus the suggestion that males employ more effective response repertoires for controlling stress (Etzion and Pines, 1981; Pearlin and Schooler, 1978) would seem to be valid at least for the 16-35 year old males. The 16-35 year olds males were also significantly more likely to respond using 'Passive' response than the older males. This last coping strategy correlated for this age group of males with 'weekly alcohol intake'.

The results also lent support to the view that females of all ages were better at using 'Social support' than the males and the differences in the use of this coping strategy were as a result of gender as opposed to age variations (Etzion and Pines, 1981). But these comparisons could not be made for the counselling group as the 16-35 year old males were under represented, all that was observed that the females of that age group came to the counselling with significantly higher means for the use of 'Palliative' response than the 36-64+ females.

But for the 36-64+ year old males, the counselling produced significant change in the use of 'Depressive' response to the post-treatment stage and for the use of 'Social support'

even to the follow-up stage, whereas for the 36-64+ year old females there was significant change as a result of the counselling for 'Rational actions'; 'Social support' (only to post-treatment) and 'Depressive and Emotive' responses to the follow-up stage.

This again supports Bunce's suggestion that stress and the coping strategies used are influenced by not only the gender of the subjects but also their ages (Bunce, 1997). This also indicates that the experience of stress, methods of coping with it and ability to change, changes with age; and here the finding seems to indicate that the older groups have more ability to make use of counselling to effect change. All the above lends support to the idea that not only is gender a modifier with respect to coping strategies in response to work stress but age and gender interactions are also modifiers to the above responses etc.

10.3.16 Coping strategies - Professional status

From the above it can be seen that the coping strategy responses to stress vary depending on the demographic variables, particularly gender and age. However, it has been suggested by a number of papers that another critical factor may be around locus of control. Many papers have suggested that there were gender differences in the experience and reactions to stress (Buck, 1972; French and Caplan, 1970, 1972; Karasek, 1979; Margolis et al, 1974; Payne and Hartley, 1987; Rees and Cooper, 1992a; Spector, 1986). But Folkman and Lazarus (1980), found no gender differences. What they pointed out was that no differences were found when both genders were in similar environments. For this reason this data was examined for differences between a further two sub-groups i.e. whether the subjects was in a group classified as having a professional status and those who could be seen as having a non-professional status.

When looking at the levels for the various coping strategies, in the baseline sample there was little difference between the age groups and professional status of the respondents in their methods of coping with stress. Here the critical differences seem to be gender specific particularly for the non-professional group, in that the females were more likely than the males to use 'Palliative, Depressive and Emotive' responses and 'Social support'. There were generally no gender differences in the use of 'Rational actions' or 'Passive responses' except that the younger 16-35 year old males amongst the non-professional group were more likely than the females within this group to use these last two coping strategies as a way of dealing with their stresses.

Controlling for age group (36-64+) and specific professional groups (e.g. managers and teachers), the results for the baseline study generally supported the overall results particularly for the teachers. But for the managers, there were no significant differences between the ways the genders coped with stress for any of the coping strategies. This last result supported the view that the gender difference does not exist when controlled for professional status, but maybe this was true just for this high stressed group of the professionals i.e. managers (Folkman and Lazarus, 1980).

However, there were still gender and professional status differences in the effects of counselling. With respect to the counselling subjects, the professional males were able to reduce their mean so that it was no longer significantly higher than the baseline norm for 'Rational actions' but were only able to produce significant change at the post-treatment stage for 'Palliative response' as this change was lost by the follow-up stage. The exception was for 'Social Support' where they came with a similar mean to that of the baseline sample and improved on that, to obtain significant mean change, to at least the post-treatment stage and, although they lost some of the gains by the follow-up stage, the mean at that stage was still significantly higher than the baseline mean. This indicated that this was one concrete area where at least the professional males benefited from the counselling process.

With respect to the professional females in the counselling sample, the two coping strategies where they were able to produce significant change up the follow-up stage, was for 'Rational action', bringing them in line with the mean levels of their males counterparts, and with 'Depressive response' where the change was even more significant. This also therefore indicates that these are the areas where counsellors would do well to focus on for the professional females, particularly 'Depressive response' as this study, as well as others, have shown that depressive response/mental health correlated well with changes in most of the work stress factors as well as changes in the measures work and personal functioning (Firth and Shapiro, 1986; McDonnell Douglas Corporation EAP audit, 1989; Mintz et al, 1992; Wells et al, 1989; Worrall, 1999). This was in contrast to the non-professionals who were only able to produce significant change for 'Depressive, Emotive and Passive' responses to the follow-up stage. The males in this group were under represented thus gender differences analyses were not viable.

This indicates that professional status at least for the males was an important variable affecting the areas that a male is likely to benefit from counselling and how effective it

might be in the long-term to produce more permanent change. From the baseline study, work stress also affected more the older non-professional males than the same age group of females. This, it was suggested, was because they might expect themselves to have more control of their work ((Payne and Hartley, 1987), but do not, so feel the frustration more, so, for example, depression will be the key area that they would want to focus on and their reaction to that i.e. 'Passive' response. But they experienced more difficulties maintaining change in those areas, as the males did across many of the variables examined. It is suggested that as the professional males seem to be able to maintain change in the use of 'Social support' and as work focussed males tend to sacrifice this area in their work/life balance, that this should be the area that counsellors can be more effective in facilitating change with their professional male clients.

Thus with respect to the professional status of the subjects the above illustrates that for certain groups the status of the subject was important. The 36-64+ year old non-professional males experienced significantly more stress than the females in the same group. The results from the counselling sample, showed again that there were underlining the gender differences in responses even when controlled for professional status. So the gender differences were consistent with respect to the degree of change i.e. how long lasting the change was, irrespective of the professional status. But the professional status affected where the change occurred.

When looking at the levels for the various coping strategies, in the baseline sample there was little difference between the age groups and professional status of the respondents in their methods of coping with stress. Here the critical differences seem to be gender specific, particularly for the non-professional group. But the change as a result of the counselling for the coping strategy 'Social support' was the one area where the professional males were able to gain significant change and to sustain it up to the follow-up stage, this was in contrast to the non-professional males who were only able to produce significant change for 'Depressive and Passive' responses to the post-treatment stage but were not able to maintain this benefit, to the follow-stage. This indicates that professional status at least for the males was an important variable affecting the areas within which a male is more likely to gain some benefit from counselling.

10.3.17 Coping strategies – summary

In summary, with respect to coping strategies the gender differences that were found in the 'Well-being' study manifested themselves again within the counselling sample. Both

genders came to counselling with significantly lower levels for 'Rational actions' than the baseline sample. In the baseline sample the females showed a significant tendency to use more 'Palliative' methods of coping than the males, i.e. seek ways to alleviate the problem without dealing with it. Women also showed they would use their 'Social supports' more than men. Further the females would tend to react with depression or more emotively, like taking it out on a partner/spouse, more often than the males, though the men showed they are more likely to react passively than the women, i.e. have a drink and try to forget about it.

This pattern of responses was echoed in those coming for counselling, though those coming for counselling differed from the baseline sample population in some very clear ways. As with the 'Well-being' sample, the male counselling subjects came with a significantly higher mean level for responding with 'Rational actions' than the females but by the post-treatment and the follow-up stages the gender differences had disappeared. For the coping strategy of 'Social support' the opposite was true, i.e. the females came with significantly higher mean levels for using this strategy but by the follow-up stage the males had improved such that there was no longer any significant difference between the genders. But overall the counselling sample came with significantly better levels of coping for strategy 'Social support' than the baseline population and continued to improve on that level as a result of the counselling.

The counselling overall had no significant affect on changing the mean level of use of the coping strategy of 'Passive' response for either gender. For the males 'Passive' response correlated with alcohol consumption, but alcohol consumption for the females correlated with all the other coping strategies except 'Rational action' and 'Passive' response. This study, in agreement with many other studies, found that improvements in mental health and 'Depressive' response correlated with improvements in work functioning and with most of the work stress factors. But overall this study certainly underlines the contention that gender is an important moderator with respect to coping responses to stress.

With respect to age although the age group 36-64+ came with higher levels of stress than the younger age group of 16-35 year olds, the younger subjects came with significantly poorer coping levels for 'Emotive and Passive' responses and that they were not able to produce significant change for these coping strategies as a result of the counselling. Thus it would seem that the older age group were able to effect more change than the 16-35 year olds. The findings would also suggest that the younger age group were more likely to use

drink, as an example of a passive response, to deal with their stresses, and were not able to change the likelihood of responding in this way as a result of the counselling.

When gender and age were examined together, in the baseline sample, the 16-35 year old males were significantly more likely to respond to stress using 'Emotive and Passive' responses than the older 36-64+ year old males; and the younger females were significantly more likely to respond with 'Emotive' responses than the older 36-64+ year old females, who themselves were significantly more likely to respond with 'Rational actions' than the 16-35 year old females. The 16-35 year old females were significantly more likely to respond to stress with 'Palliative' responses; 'Social support'; and 'Depressive and Emotive' responses when compared to the equivalent age group of males. For the males only the 16-35 year old males were significantly more likely to respond with 'Rational actions' and 'Passive' responses than the females aged 16-35 years. The 16-35 year olds males were also significantly more likely to respond using 'Passive' response than the older males. This last coping strategy correlated for this age group of males with 'weekly alcohol intake'. The results also lent support to the view that females of all ages were better at using 'Social support' than the males and the differences in the use of this coping strategy were as a result of gender as opposed to age variations.

For the 36-64+ year old males, the counselling produced significant change in the use of 'Depressive' response to the post-treatment stage and for the use of 'Social support' even to the follow-up stage, whereas for the 36-64+ year old females there was significant change as a result of the counselling for 'Rational actions'; 'Social support' and 'Depressive and Emotive' responses to the follow-up stage.

When looking at the levels for the various coping strategies, in the baseline sample there was little difference between the age groups and professional status of the respondents in their methods of coping with stress. Here the critical differences seem to be gender specific, particularly for the non-professional group. But the change as a result of the counselling for the coping strategy 'Social support' was the one area where the professional males were able to gain significant change and to sustain it up to the follow-up stage, this was in contrast to the non-professional males who were only able to produce significant change for 'Depressive and Passive' responses to the post-treatment stage but were not able to maintain this benefit, to the follow-stage. This indicates that professional status at least for the males was an important variable affecting the areas within which a male is more likely to gain some benefit from counselling.

Thus the results from the counselling sample with respect to coping strategies, showed again that there were underlining the gender differences in responses even when controlled for professional status. However, the gender differences were still consistent with respect to the degree of change i.e. how long lasting the change was, irrespective of the professional status. But the professional status affected where the change occurred.

Nevertheless the study supports the suggestion that stress and the coping strategies used are influenced by not only the gender of the subjects but also by other demographic variables e.g. age and professional status. This also indicates that the experience of stress, methods of coping with it and ability to change, change with age; and here the findings seem to indicate that the older groups have more ability to make use of counselling to effect change. All the above lends support to the idea that not only is gender a modifier with respect to coping strategies in response to work stress but age, gender and professional status interactions also affect the responses.

Generally the changes were in line with the changes in levels of work place stress, mental health and work and personal functioning, but what also became clear was that other variables, such as age, and professional status interacted with gender to give some varying results, particularly with respect to the efficacy of the counselling. However, the gender differences were much more of a controlling factor in the variability of the effectiveness of the counselling process in changing the subjects' coping strategies.

11. Conclusion

11.1 Overview of key findings

This study set out to look at the effectiveness of brief therapy in an employee assistance programme (EAP) setting. As the use of a control group would not have been perceived as ethical in this commercial field, it was decided to obtain baseline normative measures from a random sample of the whole work force population. The counselling subjects came from the same organisational population used to obtain the baseline normative means.

The study was thus in two parts. The first part was carried out to obtain the baseline measures for work stress and coping strategies (among other measures not shown in the main body of this report). The second part examined the effectiveness of brief therapy in promoting change in those coming for counselling with respect to work stress, mental health, work and personal performance, and coping strategies. The study also looked at whether the brief therapy as offered by an employee assistance programme was cost effective. The study produced a number of key findings.

Firstly, from the baseline normative study (stage 1), it became clear that for work stress, not only did the males experience more stress than the females, but the kinds of stress experienced as most problematic to each gender, were different. The males particularly experienced more stress at work from factors arising from 'Factor intrinsic to the job'; 'Career and achievement' and 'Organisational structure and climate'. But the factor which seemed to cause the most concern for the subjects as a whole was that which involved the employees trying to balance their involvements at work with their home life, i.e. the factor known as 'Home/work interface'. For this factor there was no difference between the genders. It was also found that the relative experience of stress changed with age. Nevertheless, overall it was found that there were gender differences in the experience of stress. However, amongst those in the professional status group when controlled for age there were no gender differences but there were differences with respect to age for the professional males and for the non-professionals females. This would indicate that the experience of stress is less personality related, as suggest by many, and more related to the gender, age and professional status of the subjects.

Notwithstanding the above, the baseline study did find significant gender differences in the way males and females dealt with their stresses. The females took significantly more time off sick than the males. However, the cost of that sickness was not significantly different

as the males in each professional group earned significantly more than their female counterparts. But the males had significantly lower levels of 'presenteeism' than the female, suggesting that the males' way of dealing with stress was to stay at work but not to function very well while being there. It was calculated that the lower levels of presenteeism for the males cost the organisation significantly more than the females and the overall cost of stress through sickness and lowered levels of presenteeism were considerable.

The baseline study found that there were also significant differences in the ways males and females coped with stress. The males favouring 'Rational actions' and 'Passive' responses (such as drinking more) and the females favoured 'Depressive and Emotive' responses and the use of 'Social support'.

In the second part of the study, where the effectiveness of the counselling process was examined, it was perhaps not surprising to find genders differences in responses to the counselling, given the baseline results showed clear and significant gender differences in coping strategies. But again for this sample the changes with respect to work stress, mental health, work and personal functioning and coping strategies were also dependent on the interaction of gender with age and professional status.

The gender proportions of those who came for counselling were fairly representative of the organisation as a whole, but tended to be aged 36-64+ and to be from the professional status group. This challenges the concept that those who were most likely to use counselling were young and female. The counselling sample also drank significantly more than the baseline norm.

Overall those who came for counselling took significantly more days off sick. This applied to both the females and the males. However, contrary to the findings from the baseline sample where there was a significant difference between the levels of sickness for the males and females (females having significantly more days off sick), for those coming for counselling there was no significant difference between the genders in their days off for sickness, nor was there when the genders were controlled for age.

The counselling subjects accounted for significantly higher sickness costs than the baseline sample, lower levels of presenteeism, and therefore higher costs for presenteeism and hence total stress costs. The higher sickness level was mostly from the females, aged 36-

64+. But when the counselling group was controlled for age i.e. within the 36-64+ age group, the males cost significantly more for sickness and presenteeism than the females.

From the counselling sample this study showed that the counselling process improved the levels of stress for most of the various stress factors and thus for the 'Total work stress' at least by the follow-up stage. Amongst those who came for counselling the 36-64+ year old males came with significantly higher stress levels than the same age group of females for all the stress factors except for 'Home/work interface' where there was no significant difference. Overall the males gained much in reducing their stress to the post-treatment stage but lost most of the benefits of the counselling with respect to changes in work stress by the follow-up stage. The females were able not only to achieve significant improvements in their work stress levels through counselling, but in most factors were able to hold onto this improvement and benefit from at least the 6 month consolidation period to improve even more. The males were not able to do this. Thus gender seemed to be an important variable which affected the response outcome.

When 'Home/work interface' was examined, though altogether there seemed to be no gender differences in response, when age differences were examined together with gender in the baseline study, it was found that that the work stress factor 'Home/work interface' affected the females more than the males in the younger age group of 16-35 years of age, who were more likely to have younger children, but there were no gender differences for the older age group 36-64+, many of whom were in the professional work status group. The professionals themselves in the counselling sample were able only to produce good change at the follow-up stage for the factors 'Home/work interface' and 'Total work stress' but the non-professionals produced good effect sizes for their change at both post-treatment and the follow-up stages. All the above indicates the importance of examining the demographic differences in order to show and understand response differences. It is worth noting too that the 'Home/work interface' was the work stress factor which was experienced most and that while counselling helped to reduce the level of stress for this factor particularly for the females, the level was not reduced such that the mean was no longer significantly different from the baseline norm as the start mean of the counselling sample was so much higher proportionally than the baseline mean. This factor was one of the most worrying for the subjects but was also the area that they reduce most via the counselling, particularly the females, but were not able to reach a point where the mean level for any group was no longer significantly different from the norm.

The results underlined that the critical variable was gender as there were still gender differences in responses even when controlled for age or professional status i.e. the gender differences were consistent with respect to the degree of change i.e. how long lasting the change was, irrespective of the professional status. But the professional status affected where the change occurred. Some studies have suggested that the experience and responses to stress were a function not only of a situation but the belief the individual had in their ability to control the situation, individual intelligence, experience and education. This study challenged this view not only from the findings within the baseline study where younger non-professional females were more stressed than the older non-professional females and where the reverse was true for the non-professional males, but also for the counselling sample. In this sample it was the non-professional females who produced good change as a result of the counselling for more factors than the professional females by the follow-up stage. This might have been because the non-professionals could learn from the counselling process to be in more control of their lives but the professionals felt whatever they learnt, because of their responsibilities, they were still not able to exert sufficient control over their own working lives.

With respect to cost effectiveness, these results show very clearly how it would be important in examining such data by looking at the genders separately and to use several tools for recording the change, for example, without the presenteeism measure the results would seem to show that providing males with counselling did not serve the organisation very well with respect to cost. However, what this study found was that the genders responded differently and overall the data showed that the counselling was cost effective for both genders even though what changed depended on the gender being examined. Thus for these subjects the counselling process was cost effective in reducing the 'Total work stress' and increasing the levels of presenteeism of the subjects as a whole, but it was even more beneficial for the females, certainly by the follow-up stage. The males benefitted more by increasing their levels of presenteeism. Therefore it can be said that these findings suggest that the counselling process was cost effective to varying degrees irrespective of the way the saving was calculated.

When comparing the genders for mental health and personal functioning there were no significant differences between the genders, at the pre-treatment stage, whereas for work functioning the males showed they were performing at a level that was significantly worse than the females (scoring significantly higher means), which was consistent with the findings concerning the more specific work stress factors. On examining the mental health

measure, the counselling subjects came to the therapy with mental health levels that were significantly higher than that of the norm. Those who benefited most from the counselling by improving their mental health immediately after treatment were the males as shown particularly by their higher mean effect sizes for the change and the proportion who achieved clinically significant and reliable change, as compared with the females. The mean effect sizes for all groups were relatively high and the proportions achieving change were high. However, only the non-professionals and 16-35 year old groups were able to increase their mean mental health levels such that by the follow-up it was no longer significantly lower than the norm. The professional males for this measure showed a different trend as compared with the results for other variables in that they showed an improved mean effect size at stage 4 (the follow-up stage) and unexpectedly this was higher than that of the females at this stage.

Thus, within this variable the males showed the best mean improvement and were unusually able to hold onto that change at least up to the six month follow-up stage and at the pre-treatment and follow-up stages there were no significant differences between the genders. But like many of the other variables the mean mental health of the males at the post-treatment stage was significantly higher than that of the females. Thus with respect to mental health the counselling helped to produce equal improvement for both the males and females, but because all the counselling subjects came with significantly lower levels of mental health as compared with the baseline norm, with the exception of the 16-35 year olds and the non-professionals, the counselling process was still not able to bring the mean levels for mental health for the subjects overall to the point where it was no longer significantly different from the baseline norm, though the percentage who achieved clinically significant and reliable change was high at 50%.

Further, the subjects also came to counselling with work functioning levels that were significantly poorer than the norm and while the counselling produced significant change, only the females were able to improve on their levels and by stage 4 their levels were no longer significantly higher than the norm whereas the males while producing good significant change at the post-treatment stage they were not able to maintain this by the follow-up stage. All groups were able to improve their personal functioning at both stages of the study and by the follow-up stage the mean level for most groups was such that the levels were no longer significantly higher than the norm and nearly all groups (other than the professional males at stage 4) were able to produce above average mean effect sizes for the change at both stages 3 and 4. So the counselling was effective in producing change

for both genders in personal functioning, but as with other variables, one group of males, i.e. the professional males, were not able to maintain that change to the follow-up stage. But overall the study found that the counselling process was effective in producing significant change with respect to mental health, work and personal functioning.

However, the question this study wished to address was not that the counselling process was helpful in producing change per se but where the counsellors could focus their work in order to promote change within the above variables. The analyses of the work stress factors, mental health, work and personal functioning does not exactly allow for this. Thus, the need to look at the coping strategies of the subjects with the proposal that these would allow for more detailed analyses concerning the effects of the counselling process on changing/improving coping strategies. The idea was that changes in coping strategies were perhaps the critical aspect in dealing with stress and is the area where counsellors can be most effective in promoting change and hence the experience of stress in the work place and the consequential levels of mental health, work and personal functioning.

It is when the coping strategies were examined that the differences in gender responses became clearer. In the 'Well-being' study it was found that the male respondents would cope with stress with more 'Rational actions' than the females, whereas the women would use more 'Palliative' methods of coping than the men, i.e. seek ways to alleviate the problem without dealing with it. Women would also use their 'Social supports' better than men, but the females would also tend to react with 'Depressive' or 'Emotive' responses, like taking it out on a partner/spouse, more often than the men, though the males showed they are more likely to react with 'Passive' response than the women, i.e. have a drink and try to forget about it.

This pattern of response was echoed in those coming for counselling, though these subjects differed from the baseline sample population in some very clear ways. Both the males and females came, as might be expected, with considerably higher levels for 'Depressive' response than the baseline population. The females came with much higher levels for 'Emotive' response and the males with higher 'Passive' response. An interesting observation is that within the counselling sample, as with the baseline sample, the males also came with a significantly higher mean score for 'Rational actions' than the females but by the follow-up stage the females had learnt from the counselling such that there then was no longer any significant difference between the genders.

One of the most interesting differences between the baseline and counselling samples, was that both the male and females who came for counselling scored means for the use of 'Social support' as a coping strategy, which were significantly higher than the baseline mean. It was suggested that it may have been their ability to use this coping strategy i.e. being able to talk to someone about their problems, which allowed them to consider using and to use the counselling service. Both groups continued to improve in this coping strategy as a result of the counselling though the males improved more such that by the follow-up stage there was no longer a significant difference between the genders. This raised the question as to whether being able to use the coping strategy of 'Social support', was an indicator of the likelihood of someone being able to use a counselling service given the significantly higher mean scores of the counselling subjects over the baseline sample, or put another way, those who struggle to use social supports, it would appear, would be less likely to use a counselling service.

The study found, particularly for changes in the coping strategies, that the effectiveness of the counselling process varied in relation to the gender of the subjects. The females were helped to improve their skills in responding with 'Rational actions' and were able to sustain the change at follow-up. They were also able to reduce the level in which they responded with 'Depressive and Emotive' responses and were also able to sustain this change or improve on it by the 6 months follow-up. Counselling did not seem to help to produce any significant change for the females for using 'Palliative' response or 'Social supports', although they were already high on these two coping strategies, so maybe much change would not be expected.

In contrast, the males seemed to have been helped most by the counselling process in promoting and sustaining at follow-up the use of 'Social support' and with reducing the 'Depressive' response. They were already higher than the norm for 'Social support' and were still able to benefit from the counselling in this. The males in counselling were not helped to increase their 'Rational action', as they were already high on this strategy and there was little change in their level of coping using the 'Emotive' response, perhaps because they were already low in this response (i.e. better at not using emotive response as a way of coping, e.g. did not shout at people as much as the females when stressed) and this groups' response was not very different from the males in the baseline sample. The males were also helped by counselling to lower their 'Depressive' response and by the follow-up stage the males were able to produce good effect size for the change for this coping strategy. Thus the counselling was able to produce considerable benefit to the males

and females coming for counselling with respect to lowering the levels of coping with stress by way of responding with depression i.e. feeling powerless to do anything about one's circumstances.

With respect to 'Emotive' response, the counselling treatment had a strong positive effect for this coping strategy on the females but not for the males whose mean response levels at any stage of the study was not significantly different from the baseline norm. However, for those who did come with levels that were significantly different from the baseline norm, a higher percentage of males compared with the females improved enough to produce clinically significant and reliable change.

Overall, very few groups experience sufficient change for 'Passive' response, as a result of the counselling, to produce above average mean effect sizes. Thus the counselling for the coping strategy of 'Passive' response e.g. having a drink and hoping the problem will go away, seems to have had limited effect in producing a significant reduction or change for this group of subjects.

Thus the counselling was effective in promoting change for a good percentage of the clients but the effects were found to be sensitive to gender, age and professional status interactions. This interaction, both for the experience of stress, mental health, work and personal functioning and the coping strategies and the variation in the effects of these variables on the effectiveness of counselling, has not been well examined in previous studies. The results also suggest which coping strategies for which gender/sub-groups are more susceptible to change and hence it is suggested that these result may help counsellors/therapist to be more focussed on the areas that particular groups may find easier to effect changes in.

But, in sum, the most important findings of this study were that the concept of stress, the reaction to it and the ways to cope with the stress vary with respect to gender. Further, and maybe as a consequence, the responses to counselling were affected primarily by gender. Also, importantly it was seen that the overriding gender difference was in the response to counselling where, with the exception of 'Depressive' response, 'Social support' and mental health; the males gained a great deal from the counselling by the post-treatment stage but were not able to sustain this improvement to the follow-up stage. In contrast the females were not able to gain as much overall, from the counselling process, by the post-treatment stage but were able to continue to improve up to the follow-up stage.

11.2 Research questions

The key research questions that this study looked to address were:

1. *Was the brief therapy, as offered in this EAP, effective in producing change in levels of work stress, mental health and coping strategies?*

The research demonstrated that the EAP (Employment Assistance Programme) was effective in producing change in the levels of work stress, but how much so depended on the factor being examined and for which subject group as the effect was affected mostly by gender differences but these differences also interacted with age and professional status levels. The work stress factor that concerned both genders equally was 'Home/work interface'. The counselling help to improve the stress levels for this factor for both genders but the level which was high to start with, did not reach a level where the mean was no longer significantly higher than the norm. The mental health was improved considerably for both genders by the counselling by the follow-up period even if the levels of stress did not seem to change much, that is the subjects were still stressed but seemed to be coping better with it. Thus the counselling seemed to be effective in changing the coping strategies of the subjects particularly where their skills in that area were not great. Thus the males were able to improve on their use of 'Social support' and to reduce their 'Depressive' response and the females were able to improve on their use of 'Rational actions' and reduce 'Emotive' responses. The change as a result of the counselling changed the males such that their mean level of response for the use of 'Social support' was no longer significantly different from the females, and they were able to sustain this improvement to the follow-up stage. Likewise the females were able to improve on their use of 'Rational action' such that their mean level of response was no longer significantly different from that of the males at the follow-up stage when it had been at the beginning of the counselling process. Both genders came with mean levels for the use of 'Social support' that were significantly higher/better than the baseline norm and both genders improved on the use of this coping strategy up to the follow-up stage. Neither gender was helped by the counselling process to promote significant change in the use of the 'Passive' response.

2. *Was the service cost-effective?*

The study calculated the cost of sickness, total stress and presenteeism to the organisation from the baseline 'Well-being' study using the actual salary levels of the participants of the

study. The same calculation was produced for those coming for counselling at the beginning of their counselling and the cost saving with respect to the reduction of work stress levels and increased in rate levels of presenteeism produced cost saving figures. The saving was different depending on the gender as the males and females responded differently to the counselling. The study showed that the service to the individual counselling subjects was cost effective, it was not possible to show this in absolute terms as the actual purchase cost of the service was not known as that information was commercially sensitive. Further the study was not over a long enough period to examine whether the counselling had reduced the annual sickness levels.

3. If it was effective, was the change maintained or improved upon by the 6 month follow-up stage?

This was seen as an important question as many studies only show the results of the counselling as provided by an EAP at the end of treatment often as client satisfaction data. Further, if follow-up studies were carried out the data produced was for the subjects as a whole. The very important finding of this study was that at the post-treatment stage for many of the measures the males seemed to show that the counselling was very effective in producing change for most of the variables measured. But by the follow-up stage, with the exception of the levels of mental health, depression and social support, the males had lost much of the benefits they had gain immediately after the counselling. For the females, for most of the variables the change by the post-treatment stage was often not significant and the change was often less than an equivalent group males, but by the follow-up stage unlike the males, the females continued to improve and showed significant change by the 6 month follow-up. Thus the answer to the question depends on whether the results for the males or for the female were being examined. But the males did benefit by the follow-up for mental health, depressive response and the use of social support, but by that stage the females were able to show that they had benefitted by improving in most of the variables examined.

4. Was the level of effectiveness affected by differences in demographic factors such as gender, age and professional status?

As stated above, the effectiveness of the counselling was affected certainly by the gender of the subjects and also by the interactions with gender of age and professional status. Thus it was clear from the study, as the genders and their interactions with age and

professional status affected the levels of effectiveness, that examining the subjects as one group, would not have been helpful in understanding how effective the counselling was. It was clear that as the genders responded to stresses and coped with them differently, then it would be expected that their responses to the counselling would be different. This was the finding of this research.

11.3 Methodological strengths and weaknesses of the study

As this research was carried out in the commercial field, where an organisation had bought a counselling service for their employees, then it would not have been seen as acceptable or ethical to carry out a random control trial. Thus it was decided that the effectiveness of the counselling would be measured by comparing the counselling subjects' means for the different variables with a baseline norm and to see how these means shifted towards the norm by the end of treatment. So the concern was not to compare treatment with no treatment but to see what changed and by how much by the end of the treatment period. The difficulty with this method is that it cannot be shown for sure that the change was as a result of the treatment or some other event intervening during the test period. But this was not the primary concern of the study; it was to examine demographic differences in responses. If other events occurred it could possible be assumed that these would affect all the groups irrespective of gender, age or professional status. But it was clear in the study that the various groups e.g. each gender responded to the treatment differently.

It was also decided in this research to measure the levels for the different variables within a random sample of the population from which the counselling sample would come. This it was felt would produce a more representative norm against which to measure the change within the counselling sample. This was the first study to use its own organisational norms. This was particularly necessary for the coping strategy measure as this was also the first study to carefully examine changes in coping strategies as a result of therapy and as such there was no previous normative data to call upon. Further, there can also be questions about the validity of some of the normative samples used in other studies, in that frequently university students would be used and one can ask how representative of the general population can students be said to be. However, this baseline sample might also not be representative of the population of U.K. as a whole, in that it can only be said to be representative of a local government work force, a main employer in a large county and cannot be said to represent work stress, for example in other areas of Britain or from other types of employers. What is perhaps unique about this study was that it was a large sample

and the counselling group were from that same sample, so any comparison has to be as valid or perhaps more valid than other groups used for comparison.

It is also important, as with any study, to raise the question of attrition. Kazdin (1994) indicated that anything up to 50% of the client's who begin treatment may drop out (though in this case, it cannot be assumed that because they do so, they have not benefited from the counselling process!). In this study, of those who began counselling during the period of the research 79% returned pre-treatment forms, 58% of those returned post-treatment forms and 29% returned the follow-up questionnaires. Some subjects did not return the post-treatment questionnaire (perhaps because they were not given it), but did return a follow-up questionnaire. This did raise the question whether there were any characteristic differences in the pre-treatment mean scores between those who filled out all the questionnaires or at least one of the post-treatment or follow-up questionnaires and those who only filled out the pre-treatment questionnaire. This study, as with a previous similar study (Worrall, 1999), found that there were no significant differences in the pre-treatment means for either group, whether treated as all the subjects together, or the genders separately. The level of attrition of the study was within the expected range and there did not appear to be any characteristics which separated the non-respondents of later questionnaires with the responders, when their pre-treatment questionnaires were examined. There was also no significant difference in the pre-treatment scores between those who filled out the post-treatment questionnaire and those who only filled out the follow-up questionnaire, indicating that the fact that this happen, was not likely to occur because of the differences between the two groups of subjects, but may have occurred as a result of some subjects not having received a questionnaire immediately after therapy maybe because the therapist forgot or the organisation's administration forgot to send out the papers to the clients if they did not attend their last session.

Further, as the researcher was also a practicing psychotherapist/counselling psychologist treating clients with brief therapy both in the NHS and for EAP providers, it was felt important that the research produced results that could inform practice directly within the setting where brief therapy was being offered. Thus it was felt important that the study was carried out in a naturalistic or real world brief therapy setting. This was in keeping with the conceptual and theoretical frame work of the study which was based on a post-modernist philosophy of a pragmatic practice orientation, that is the study was design from the experiences within the therapy room where the variables used were those that presented themselves most often to the therapist; and with respect to the coping strategies, the area

most focussed on by the therapists within the brief therapy model. The advantage of this would be that the study and the results would be more meaningful and accessible to the practitioner in these settings. The disadvantage of carrying out such a study was that many possible variables not addressed could affect the outcome. But the researcher's main concern was to carry out the study in a naturalistic setting using tools that were meaningful within that setting. The design of the questionnaire was set with this in mind. Thus the stress measure was used as work stress was a frequent complaint of those coming for counselling, but other stresses could be present too, so the life events measure was included. Frequently the presenting problems in counselling can be related to physical sickness etc so the 'Problems and complaints' questionnaire was used. It was also thought that there may be personality differences in the way clients deal with stress so the 'Inventory of Interpersonal problems – IIP 32' was used. Finally, along with simple questions such as how much the client earned, how many days sick they had in the last year and how they rated themselves with respect to their work efficiency/effectiveness, a measure of their coping strategies was used. The researcher was clear that it was these kinds of scales which would give a good range of measures of factors that present in the counselling room that the measures were looked for specifically to meet this need. The problem of doing this was that some of the measures had not been used before in such research so comparisons could not be made with other similar research studies. So the only valid comparisons that could be made were with the measures for mental health, work and personal functioning, and that was with a similar study with another local authority (Worrall, 1999). All that can be said about the structure of the questionnaire was that it was not a short one, it comprised of 5 scales each with about 30 questions, plus other brief questions, but notwithstanding its size it must have been meaningful to the respondents in that the response rate particularly at stage one was very good and that for the counselling subjects was within expected levels. The problem the questionnaire presented was that too much data was produced and hence much could not be presented in the main body of the study report. Thus the report focussed on the areas that were seen as being the most interesting with respect to symptom change (work stress, mental health, work and personal functioning) and changes in behaviour/process i.e. coping strategies.

Another area of recognised difficulty with the study was that the study focussed only on client responses and did not focus on the therapists providing the counselling. This meant that little could be said about the effects of training and methods/styles of working of the therapist. It was not, for example, known how experienced they were in working as brief therapist in an EAP setting. This could be a critical issue as therapist in training generally

are not prepared for working in this setting and so have to learn, for the most part, on the job. Further, as the study found that the gender of the client was a critical issue in the evaluation of the effectiveness of the brief therapy in the EAP setting, then the question that needs to be addressed but was not addressed in this study, is the effect of the gender of the therapist, for example, on the outcome. The questions that would need to be asked would be, 'Does the gender of the therapist and/or the method of working, have a differential effect depending on the gender of the client?'

11.4 Comparison with previous research

As stated above, the questionnaire was structured to have meaning to the counsellor and clients in the naturalistic setting and hence some of the scales were taken from other settings and had not been used for this kind of study. So while many of the findings were supported by other studies it would be useful to compare this study's use of the measurements for mental health, work and personal functioning with another similar study which used exactly the same tools. While this has been discussed in the discussion section (see sections 10.3.8-9) it would perhaps be useful to underline here how this study compared very favourably with at least other similar studies.

In this research the counselling treatment was effective in producing significant change for mental health for most of the groups of subjects. Though the sample came with a much lower mean mental health score at the beginning of therapy than the norm used, the mean effect size for the change was 'good' to 'very good' for at least 60% of the subjects by the follow-up stage. Cooper and Sadri (1991) and Firth and Shapiro (1986) both also found 60% of clients had improved in mental health after counselling. However, looking at the proportion of subjects who did achieve clinically significant change (as defined by Mullin et al, 2006), it was found that a relatively higher proportion achieved this than for any of the other variables measured, this compared well with Worrall (1999). In Worrall's study the mean effect size for mental health at post-treatment for all subjects was high, where as in this study it was still very good but not quite as high, but for the males on their own it was higher than that for all the subjects together in the Worrall study whereas for the females the mean effect size in this study was slightly lower. For the subjects as a whole group the proportion of subjects who produced clinical change for mental health were fairly comparable. However, when the genders were examined separately at the follow-up stage it was found that for the males the proportion was lower than that for all the subjects together in the Worrall study but the proportion for the females was higher. Thus it would appear that the effectiveness of the counselling in this study was not as good as that of the

Worrall study when looking at the data as a whole. But when the subjects were separated into their respective genders the results would tend to show more improvement in comparison with the Worrall study, particularly when looking at the females on their own. What this suggests is that the results of any study would be dependent on the gender mix of the subjects. It is not known what the gender ratio was in the Worrall study so comparison is difficult as this study indicates that the gender mix would affect the findings of the mean results for the group as a whole. It is interesting to note that, at least with respect to mental health, no subjects deteriorated in this study notwithstanding that in many studies 5-10% can be expected to deteriorate (Lambert and Ogles, 2004).

The counselling treatment was also effective in producing significant change for work and personal functioning for most of the groups of subjects. For these two variables the mean levels were reduced such that they were no longer significantly higher than the norm. The proportions that improved for both work and personal functioning were in line with such proportions as found in other studies (Macdonald, Lothian and Wells, 1997). In the Worrall study, the mean effect size for work functioning was slightly higher than that for this study for all the subject together, but for the males it was considerably higher than that found in the Worrall study and was lower for the females. For personal functioning in Worrall's study the mean effect size was again slightly higher than that for this study. But when the genders were examine separately the opposite effect was found as compared with work functioning. Here, it was the males who produced lower that average mean effect size for the change while the females produced a figure that was very much higher than that produced in the Worrall study. What this indicates again is that the effect of the counselling was gender dependent and the overall results would therefore depend on the proportion of each within the sample, thus comparisons would be difficult to make without that data. Further this also showed that the effect size of the counselling differed depending on the gender. Thus, the males produced a higher mean effect size for change for work functioning, while the females showed higher mean effect size for personal functioning than the males and higher than those produced by the Worrall study for all the subjects together. Thus it can be said that where direct or similar comparisons can be made the results from this study were in line with the findings of other studies and as such would tend to lend creditability to the results of this research.

11.5 Implications for policy and practice

This study highlights two important issues, firstly the importance of examining the gender differences within counselling data and that follow-up studies can produce very differing

results. However, the gender differences also raised the issue that males and females clearly not only respond to stresses differently but also respond to counselling differently. This presents the perhaps 'non-pc' question in the discussions about the counselling process. It is acceptable to discuss the importance of cultural/diversity awareness in the provision of counselling e.g. considering that making the goal of working towards a process of individuation as the focus of therapy might be seen as inappropriate when working with, for example, Asian clients who would see this idea as dysfunctional. However, what does not seem necessarily okay to discuss is that these results would seem to suggest that the 'one size fits all' concept of therapy might not be appropriate and that males may need to receive a different form of counselling that meets their needs, such that they might be able to sustain improvements over longer periods. This study did not examine the form of counselling that was being provided other than that it was brief therapy (up to eight sessions), so it is not possible to suggest how the counselling could have been different for the males, but what was clear was that the males did not in the longer term benefit as much.

It is also suggested that there needs to be some work that looks into whether different methods of working or different focus models of therapy work better with males and females, and how the gender of the counsellor might interact with this or directly with the effectiveness of brief therapy for each of the genders. This study was not really able to look at issues concerning the gender of the therapist as out of the twenty two counsellors involved only two were males. But looking at the models used, by whom and with whom, may have implications with respect to training i.e. by recognising that males and females may need different approaches to effect permanent change at least within the brief therapy model, for example, models that focus on changing different coping strategies. It may also reflect a need to recruit more male therapists, again at least for work as EAP affiliates.

This study also suggests that using an organisational baseline norm may facilitate the use of more naturalistic studies into the effectiveness of the therapy being offered.

Nevertheless overall the findings indicated that the model of brief therapy as used by this EAP was effective in promoting change. Further, it was seen that not only was stress costing the organisation, it was also seen that the counselling saved the organisation considerable sums of money, thus it is suggested that counselling was shown to be cost effective in the savings it brought about in reducing stress and improving, mental health,

work and personal functioning and coping strategies, but how the saving is calculated must, in keeping with the other findings, recognise gender differences in responses.

References:

- Ager, A. and MacLachlin, M. (1998).
Psychometric properties of the Coping Strategy Indicator (CSI) in a study of students coping behaviour amongst Malawians students.
Psychology and Health, 13 (3), 399-409.
- Ahn, KK and Karris, PM (1989).
Numbers versus Severity: the truth in measuring EAP cost benefits.
Employee Assistance Quarterly, 4(4) 1-14.
- Albert, W.C.; Smythe, PC. and Brook, RC (1985).
An evaluator's perspective on EAPs.
Evaluation and Program Planning 8, 175-182.
- Albrecht, K. (1979).
Stress and the manager: Making it work for you.
New Jersey: Prentice Hall.
- Alker, L. (2000).
Report on a local authority employee counselling scheme.
November 1998-April 2000
Derby: Counselling Perspectives.
- Amirkhan, J.H. (1990).
A factor analytically derived measure of coping: the Coping Strategy Indicator.
Journal of Personality and Social Psychology, 59, 1066-1074.
- Andersen, E.M. and Lambert, M.J. (1995).
Short-term dynamically orientated psychotherapy: A review and meta-analysis.
Clinical Psychology Review, 15 (6), 503-514.
- Aneshensel, C.; Frarichs, R. and Clark, V. (1981).
Family roles and sex differences in depression.
Journal of Health and Social Behaviour, 22, 379-393.
- Anthony, W. (1990) Psychiatric rehabilitation.
Boston University Center for psychiatric rehabilitation.
- Appley, M.H. and Trumbull, R. (1967).
Psychological stress.
Appleton-Century-Crofts, New York.
- Arthur, A.R. (2000).
Employee assistance programmes: the emperor's new clothes of stress management?
British Journal of Guidance and Counselling, 28, 549-559.

- Asen, J. and Colon, I. (1995).
Acceptance and use of police department Employee Assistance Programmes.
Employee Assistance Quarterly, 11, 45-54.
- Attridge, M. (2004).
The business case for the integration of employee assistance, work-life and wellness services: A literature review.
Journal of Workplace Behavioral Health, 20, 31-55.
- Aveline, M.O. (1996).
Brief therapy: Benefits and Limitations including cognitive behavioural therapies.
Current Opinion in Psychiatry, 9, 193-197.
- Avnet, H.H. (1965).
Short-term treatment under auspices of a medical insurance plan.
American Journal of Psychiatry, 122, 147-151.
- Bacharach, S.B., Bamberger, P.B. and Conley, S. (1991).
Work-home conflict among nurses and engineers: mediating the impact of role stress on burnout and satisfaction at work.
Journal of Organizational Behaviour, 12, 39-53.
- Bandura A. (1969) *Principles of Behaviour Modification*
New York Holt, Rinehart and Winston.
- Bandura, A. (1977).
Self-efficacy: towards a unifying theory of behavioural change.
Psychological Review, 84, 191-215.
- Barkham, M. (1989).
Brief prescriptive therapy in two-plus-one sessions: initial cases from the clinic.
Behavioural Psychotherapy, 17: 161-75.
- Barkham, M. and Shapiro, D.A. (1990).
Brief psychotherapeutic interventions for job related distress: a pilot study of prescriptive and exploratory therapy.
Counselling Psychology Quarterly 3(2), 133-147.
- Barkham, M, Hardy, G and Startup, M. (1994).
The Structure, validity and clinical relevance of the Inventory of Interpersonal Problems.
British Journal of Medical Psychology 67, 171-185.
- Barkham, M, Hardy, G and Startup, M. (1996).
The IIP-32: A Short version of the Inventory of Interpersonal Problems.
British J. of Clinical Psychology, 35, 21-35.
- Barkham, M., Shapiro, D.A., Hardy, G.E. and Rees, A. (1999).
Psychotherapy in two-plus-one sessions: outcomes of randomised controlled trial of cognitive-behavioural and psychodynamic-interpersonal therapy for subsyndromal depression.
Journal of Consulting and Clinical Psychology 67 (2), 201-11.
- Barlow, D.H.; Hayes, S.C. and Nelson, R.O. (1984) *The Scientist Practitioner*.
New York: Pergamon Press

- Barth, P.S. (1990).
Workers' compensation for mental stress cases.
Behavioural Sciences and the Law, 8, 358.
- Barth, K.; Neilsen, G.; Haver, B.; Havik, O.E.; Molstad, E.; Rogge, H. and Skatum, M. (1988).
Comprehensive assessment of change in patients treated with short-term dynamic psychotherapy: An overview.
Psychotherapy and Psychosomatics, 50, 141-150.
- Baruch, G.K. and Barnett, R.E. (1987).
Role quality and psychological well-being.
In F.J. Cobb (ed.) *Spouse, parent and worker: On gender and multiple roles*.
Yale University Press, New Haven, Connecticut.
- Basch, M.F. (1988) *Understanding Psychotherapy: the science behind the art*.
New York: Basic Books.
- Beattie, R.T., Darlington, T.G. and Cripps, D. M. (1974).
The Management threshold.
British Institute of Management Paper, no: OPN 11 BIM, London.
- Beehr, T.A.; Walsh, J.T. and Taber, T.D. (1976).
Relationship of stress to individually and organisationally valued states: Higher order needs as moderator.
Journal of Applied Psychology 61, 41-47.
- Beehr, T.A. and Newman, J.E. (1978).
Job stress, employee health, and organisational effectiveness: a facet analysis, model and literature review.
Personnel Psychology, 31, 665-699.
- Beehr, T. and Schuler, R. (1980).
Stress in organisations.
In K. Rowland and G. Ferris (eds.) *Personnel management*; 390-419
Boston Allyn and Bacon.
- Beitman, E.C. (1987) *the structure of individual psychotherapy*.
New York: Guilford.
- Bennett, J.B. and Lehman, W.E.K. (2001).
Workplace substance abuse prevention and help seeking: comparing team-oriented and informational training.
Journal of Occupational Health Psychology, 6, 243-254.
- Bhagat, R.S. and Chassie, M.B. (1981).
Determinants of organizational commitment in working women: some implications for organizational integration.
Journal of Occupational Behaviour, 2, 17-30.
- Bhalla, S., Jones, B., and Flynn, D. M. (1991).
Role stress among Canadian white-collar workers.
Work and Stress, 5, 289-299.

- Bickerton, R. (1990).
Why are EAPs worth the investment.
In L. Stern (ed.) *Business and Health* (14-19).
- Billings, A.G. and Moos, R.H. (1981).
The toll of coping responses and social resources in attenuating the stress of life events.
Journal of Behavioral Medicine, 4, 139-157.
- Blaze-Temple, D. and Howat, P. (1997).
Cost benefit of an Australian EAP.
Employee Assistance Quarterly, 12(3), 1-24.
- Blum, T. C. and Roman, P. M. (1992).
A description of clients using employee assistance programs.
Alcohol Health Research, 16(2), 120-128.
- BOHRF (2005).
Workplace interventions for people with common mental health problems: Evidence review and recommendations.
London: British Occupational Health Research Foundation.
- Boring, E.C. (1950) *A history of Experimental Psychology*.
Englewood Cliffs, NJ: Prentice-Hall.
- Braun, A. and Novak, D.E. (1986).
A study of EAP non-utilization.
EAP Digest, 7 (1): 52-55.
- Bray, J. W., French, M. T., Bowland, B. J. and Dunlap, L.J. (1996).
The cost of employee assistance programs (EAPs): Findings from seven case studies.
Employee Assistance Quarterly, 11(4): 1-19.
- Brewer, G. and Stanford, B (2008)
The Best of the Gallup Management Journal 2001-2007.
Gallup Press.
- Broadbent, D.E. (1971).
Decisions and stress.
Academic Press, New York.
- Brody; B.E. (1988).
EAPs: An historical and literature review
American Journal of Health Promotion, Winter 2(3), 13-19.
- Brodzinsky, J.D. and Goyer, K.A. (1987).
Employee Assistance Program utilization and gender.
Employee Assistance Quarterly, 3, 1-13.
- Bruhnsen, K. (1989).
EAP evaluation and cost benefit savings: a case example.
Health Values, 13 (1), 39-42.

- Buck, V. (1972).
Working under pressure.
Staples Press, London.
- Budman, S.H. (1981).
Looking towards the future.
In S.H. Budman (Ed.): Forms of brief therapy, 461-467.
New York: The Guilford Press.
- Bunce, D. (1997)
What factors are associated with the outcome of individual-focussed worksite stress management interventions?
Journal of Occupational and Organizational Psychology, 70 (1): 1-17.
- Bunting, M. (2004).
Willing slaves: how the overwork culture is ruling our lives.
London: Harper Collins.
- Burke, R.J. (1986).
Occupational and life stress and family: conceptual frameworks and research findings.
International Review of Applied Psychology, 35, 347-369
- Burke, R.J. (1994).
Utilisation of Employee Assistance Program in a public accounting firm; some preliminary data.
Psychological Reports, 75, 264-266.
- Burlingame, G.M. and Fuhrman, A (1987).
Conceptualising short-term treatment: a comparison review.
Counselling Psychologist, 15, 557-595.
- Burlingame, G.M.; Fuhrman, A.; Paul, S. and Ogles, B.M. (1989).
Implementing a time-limited therapy program: Differential effects of training and experience.
Psychotherapy, 26 (3), 303-312.
- Butterworth, I.E. (2001).
The components and impact of stigma associated with EAP counselling.
Employee Assistance Quarterly, 16, 1-9.
- Canadian Mental Health Association (1984).
Work and Well-Being: The changing realities of Employment.
Toronto, Ontario.
- Carroll, M. (1996).
Evaluating Workplace Counselling. Workplace Counselling: A Systematic Approach to Employee Care.
London: Sage.
- Carroll, M. (1997a).
Building Bridges: A study of employee counsellors in the Private sector
In Carroll, M. and Walton, M. (eds.): Handbook of Counselling in organisations
London: Sage.

- Carroll, M. (1997b).
Counselling in Organisations: An overview.
In M. Carroll and M. Walton (eds.): Handbook of Counselling in Organisations, 8-28.
London: Sage.
- Carver, C.S.; Scheier, M.F. and Weintraub, J.K. (1989).
Assessing coping strategies: A theoretically based approach.
Journal of Personality and Social Psychology, 56 (2), 267-383.
- Cayer, N.J. and Perry, R.W. (1988).
A framework for evaluating employee assistance programs.
Employee Assistance Quarterly, 3 (3/4), 151-168.
- CBI Conference (1991).
Prevention of Mental Ill Health at Work
Eds. Jenkins, R. and Coney, N.
London HMSO.
- CBI Conference, (1993).
Promoting mental health policies in the workplace
Eds. Jenkins, R and Warman, D
London HMSO.
- CBI Publication (1993).
Working for your health: Practical steps to improve the health of your business.
CBI Centrepont London.
- Chandler, R. G., Kroeker, B. J., Fynn, M. and MacDonald, D. A. (1988).
Establishing and evaluating an industrial social work programme: the Seagram,
Amherstburg experience.
Employee Assistance Quarterly, 3(3/4), 243-251.
- Cheeseman, M.J. (1996).
Is staff counselling an effective intervention into employee distress? An investigation of
two employee counselling services in the NHS.
Unpublished PhD thesis, Social and Applied Psychology Unit, University of Sheffield.
- Chi, M.T.H.; Glaser, R. and Farr, M. (1988) The nature of expertise.
Hillsdale, NJ: Erlbaum.
- Chubb, H. and Evans, E.L. (1990).
Therapist efficiency and clinic accessibility with the Mental Health Research Institute brief
therapy model.
Community Mental Health Journal 26, 139 – 149.
- C.I.P.D. Survey (2004)
Employee Opinion Survey.
HR Calendar Industry Resource.
Chartered Institute of Personnel and Development.
27th October, 2004.

- Cincirpini, P., Hook, J. D., Mendes de Leon, C. F. and Pritchard, W.S. (1984).
A Review of cardiovascular, electromyographic, electrodermal and respiratory measures of psychological stress.
National Institute for Occupational Safety and Health, contract no: 84-257, Cincinnati, Ohio.
- Cleary, P. and Mechanic, D. (1983).
Sex differences in psychological distress among married people.
Journal of Health and Social Behaviour 24, 111-121.
- Cobb, S. and Kasl, S.V. (1977).
Termination: the consequences of job loss.
US Department of health, Education and Welfare, Cincinnati.
- Coffman, C. and Gonzalez-Molina, G. (2002)
Follow this Path: How the world's greatest organizations drive growth by unleashing human potential.
Gallup Press.
- Cohen, L.H.; Sargent, M.M. and Sechrest, L.B. (1986)
Use of psychotherapy research by professional psychologists.
American Psychologist, 41: 198-206.
- Cohen, S. and Willis, T.A. (1985).
Stress, social support and the buffering hypothesis.
Psychological Bulletin, 98, 310-357.
- Coles, A. (2003).
Counselling in the workplace.
Buckingham: Open University Press.
- Collins, K. (1998).
Cost benefits analysis shows EAPs' value to employer
EAP exchange Nov/Dec, 6-20.
- Conato, J.; Shah, N. and Horwitz, R.I. (2000).
Randomized, controlled trials, observational studies, and hierarchy of research designs.
New England Journal of Medicine, 342, 1887-1892.
- Cooper, B. (1966).
Social Psychiatry, 1, (7).
- Cooper, C.L. (1978).
Work stress.
In: P.B. Warr (Ed): Psychology at Work
Penguin, Harmondsworth.
- Cooper, C.L. (1981).
Executive families under stress.
Prentice Hall, Englewood Cliffs, New Jersey.

- Cooper, C.L. (1983).
Stress Research: Issues for the Eighties.
Chichester: Wiley.
- Cooper, C.L. and Baglioni, A.J. (1988).
A Structural model approach toward the development of a theory of the link between stress and mental health.
British Journal of Medical Psychology 61, 87 – 102.
- Cooper, C.L. and Davidson, M. (1982).
High pressure: Working lives of women managers.
Fontana, London.
- Cooper, C.L. and Davidson, M. (1987).
The high cost of stress on women managers
Organisational Dynamics, 10 (4), 44-53.
- Cooper, C.L. and Marshall, J. (1976).
Occupational sources of stress: a review of the literature relating to coronary heart disease and mental ill health.
Journal of Occupational Psychology, 49, 11-28.
- Cooper, C. L., Sadri, G., Allison, T. and Reynolds, P. (1990).
Counselling in the post office.
Counselling Psychologist Quarterly, 3 (1): 3-11.
- Cooper, C.L. and Sadri, G. (1991).
The impact of stress counselling at work.
In Perrewe, P. (ed.) Handbook on job stress (special issue).
Journal of Behaviour and Personality.
- Cooper, C.L., Sloan, S.J. and Williams, S. (1988).
Occupational Stress Indicator: Management guide
ASE, A Division of NFER-Nelson, Windsor.
- Copper, L.C. and Williams, J. (1991).
A validation study of the OSI on a blue-collar sample
Stress Medicine, 7, 109-112.
- C.O.R.E. IMS
CORE News May, 2008
coreims.co.uk
- Coudriet, T.W; Swisher, JD; Grissom, G. (1987).
The role of gender in requests for help in EAPs
Employee Assistance Quarterly Sum Vol. 2(4) 1-12.
- Cox, T. (1978).
Stress.
Macmillan, London.

- Cox, T. (1980).
Repetitive work.
In: C.L. Cooper and R. Payne (Eds): Current concerns in occupational stress.
Wiley and Sons, Chichester.
- Cox, T. (1985).
The nature and measurement of stress.
Ergonomics, 28, 1155-1163.
- Cox, T. (1987).
Stress, coping and problem solving.
Work and Stress, 1, 5-14.
- Cox, T. (1990).
The recognition and measurement of stress: conceptual and methodological issues.
In E.N. Corlett and J. Wilson (eds.) *Evaluation of human Work*.
Taylor and Francis, London.
- Cox, T., Leather, P. and Cox, S. (1990).
Stress, Health and organisations.
Occupational Health Review, 23, 13-18.
- Cox, T. and Ferguson, E. (1991).
Individual differences, stress and coping.
In: C.L. Cooper and R. Payne (eds.) *Personality and Stress*.
Wiley and Sons, Chichester.
- Cox, T. and Howarth, I. (1990).
Organisational health, culture and helping.
Work and Stress, 4, 107-110.
- Cox, T. and Kuk, G. (1991).
Healthiness of schools as organisations: teacher stress and health.
Paper to: International Congress, Stress, Anxiety and Emotional Disorders.
University of Minho, Braga, Portugal.
- Cox, T. and Leiter, M. (1992).
The health of healthcare organisations.
Work and Stress, 6, 219-227.
- Cox, T. and Mackay, C.J. (1981).
A transactional approach to occupational stress.
In: E.N. Corlett and J. Richardson (eds.) *Stress, work design and productivity*.
Wiley and Sons, Chichester.
- Cox, T. and Mackay, C.J. (1982).
Psychological factors and psychophysiological mechanisms in the aetiology and development of cancers.
Social Sciences and medicine, 16, 381-396.
- Cranwell-Ward, J. (1987).
Managing stress
Gower ISB no. 0566 027 658.

- Crits-Christoph, P. (1992).
The efficacy of brief dynamic psychotherapy: A meta-analysis.
American Journal of Psychiatry, 149 (2), 151-158.
- Crits-Christoph, P. Baranackie, K.; Kurcias, J.S.; Carroll, K.K.; Luborsky, L.; McLellan, T.; Woody, G.; Thompson, L.; Gallagier, D. and Zitrin, C. (1991).
Meta-analysis of therapist effects in psychotherapy outcome studies.
Psychotherapy Research, (1), 81-91.
- Cronbach, L.J. and Gleser, G.C. (1965).
Psychological tests and personnel decisions.
2nd ed. Urbana, IL: University of Illinois Press.
- Cross, D.G., Sheehan, P.W. and Khan, J.A. (1982).
Short and long term follow-up of clients receiving insight-orientated therapy and behaviour therapy.
Journal of Consulting and Clinical Psychology, 50, 103-112.
- Csiernik, R. (2002).
An overview of employee and family assistance programming in Canada.
Employee Assistance Quarterly, 18, 17-33.
- Csiernik, R. (2003).
Employee Assistance program utilization: developing a comprehensive scorecard.
Employee Assistance Quarterly, 18, 45-60.
- Csiernik, R. (2004).
A review of EAP evaluation in the 1990s.
Employee Assistance Quarterly, 19, 21-37.
- Csiernik, R. (2005).
The evolution of occupational assistance from social control to health promotion.
In R. Csiernik (ed.) *Wellness and work: Employee Assistance Programming in Canada*.
Toronto: Canadian Scholars Press
- Csiernik, R., Atkison, B., Cooper, R., Devereux, J. and Young, M. (2001).
An examination of a combined internal-external Employee Assistance Program: the St Joseph's Health Centre employee counselling service.
Employee Assistance Quarterly, 16, 37-48.
- Dainas, C. and Marks, D. (2000).
Evidence of an EAP cost offset.
Behavioral Health Management, July/August, 34-41.
- Davidson, M.J. and Cooper, C.L. (1981).
A model of occupational stress.
Journal of Occupational Medicine, 23, 564-570.
- Davidson, M.J. and Cooper, C.L. (1983).
Working women in the European Community – the future prospects.
Long Range Planning, 16, 49-54.

- DeGroot, T. and Kiker, D.S. (2003).
A meta-analysis of the non-monetary effects of employee health management programs.
Human Resource Management, 42, 53-69
- Delaney, W., Grube, J.W. and Ames, G.M. (1998).
Predicting likelihood of seeking employee assistance.
Addiction, 93, 399-410.
- Department for Education and Employment (2000).
Work-life balance: changing patterns in a changing world.
London: Stationary Office.
- Dewe, P. (1987).
New Zealand ministers of religion: identifying sources of stress and coping strategies.
Work and Stress, 1, 351-363.
- Dewe, P. (1991).
Measuring work stressors: the role of frequency, duration and demand.
Work and Stress, 5, 77-91.
- Dewey, J. (1910) Science as subject-matter and as method.
Science, 36, 127.
- Dickson, W. and Roethlisberger, F.J. (1966).
Counselling in an organization
Cambridge, MA: Harvard University Press.
- Dobson, K.S. (1989).
A meta-analysis of the efficacy of cognitive therapy for depression.
Journal of Consulting and Clinical Psychology, Vol. 56, pp 673-680.
- Dohrenwend, B.S. and Dohrenwend, B.P. (1974).
Stressful life events: their nature and effects.
Wiley and Sons, New York.
- Dohrenwend, B.S., Krasnoff, L. Askenasy, A. R. and Dohrenwend, B. P. (1988).
The psychiatric epidemiology research interview life events scale.
In: L. Goldberg and S. Breznitz (eds.) *Handbook of stress: theoretical and clinical aspects*.
Free Press, New York.
- Dreyfus, H.L. and Dreyfus, S.E. (1986) *Mind over machine*.
New York: Free Press.
- Drummond, M.F (1990).
Allocating Resources.
International Journal of Technology Assessment in Health Care, 6, 77-92.
Cambridge University Press.
- Einhorn, H.J. and Hogarth, R.M. (1981).
Behavioural decisions theory: process of judgement and choice.
Annual Review of Psychology, 32, 53-88.

- Elkin, I.; Shea, M.T.; Watkins, J.T.; Imber, S.D.; Lotsky, S.M.; Collins, J.F.; Glass, D.R.; Pilkonis, P.A.; Weber, W.R.; Docherty, J.P.; Fiester, S.J. and Parloff, M.B. (1989).
NIMH treatment of depression collaborative research program: General effectiveness of treatments.
Archives of General Psychiatry, 46, 971-983.
- Elliot, M.S. and Williams, D.I. (2002).
A qualitative evaluation of an employee counselling service from the perspective of client, counsellor and organisation.
Counselling Psychology Quarterly, 15, 201-208
- Emmelkamp, P.M.G. (1986).
Behavior therapy with adults.
In S.L. Garfield and A.E. Bergin (Eds): Handbook of Psychotherapy and Behavior Change pp 385-442
New York: Wiley.
- Employee Assistance Professionals Association (EAPA) (2006).
Market research. Downloaded on 30th August 2006 from:
http://www.eapa.org.uk/EAPA_MarketInfo.htm.
- Endler, N.S. and Parker, J.D. A. (1990a).
Coping Inventory for Stressful Situations (CISS): Manual.
Toronto: Multi Health Systems.
- Endler, N.S. and Parker, J.D.A. (1990b).
Multidimensional assessment of coping: A critical evaluation.
Journal of Personality and Social Psychology, 58, 844-854.
- Etzion, D. and Pines, A. (1981).
Burnout and coping with its antecedents: A cross-cultural, cross-sexual perspective.
Paper presented at the International Interdisciplinary Congress on Women.
Haifa, Israel.
- Fairhurst, D. (2008)
In: A. Kinder; R. Hughes. and C.L. Cooper (Eds): Employee Well-Being Support – A Workplace Resource
John Wiley and Sons, Ltd
- Feather, N.T. (1990).
The Psychological Impact of Unemployment.
Springer-Verlag, New York.
- Feifel, H. and Strack, S. (1989).
Coping with conflict situations: Middle-aged and elderly men.
Psychology and Aging, 4(1), 26-33.
- Feinstein, B. and Brown, E (1982).
The New Partnership: Human Services: Human Services, business and Industry.
Cambridge, MA: Schenkman XI
- Feldman, S. (1991).
Today's EAPs make the grade.
Personnel, 68, 3-4.

- Feyerabend, P. (1975) *Against method: Outline of an anarchistic theory of knowledge*. London: New Left Books.
- Filipp, S.H.; Klauer, T. and Ferring, D. (1993).
Self-focused attention in the face of adversity and threat.
In H.W. Krohne (Ed), *Attention and avoidance: Strategies in coping with aversiveness* (pp. 267-295).
Seattle, WA: Hogrefe and Huber.
- Firth, J.A. and Shapiro, D.A. (1986).
An evaluation of psychotherapy for job related distress.
Journal of Occupational Psychology 59, 111-119.
- Fisher, S. (1986).
Stress and Strategy.
Lawrence Erlbaum Associates. London.
- Fishman D.B. (1999) *The Case for Pragmatic Psychology*
New York University Press.
- Fleming, J.H. (2008)
Human Stigma: Managing the Employee – Customer Encounter.
Gallup Press.
- Fletcher, B.C. (1988)
The epidemiology of occupational stress.
In C.L. Cooper and R. Payne (Eds): *Causes, Coping and Consequences of Stress at Work*.
Wiley and Sons, Chichester.
- Folkman, S. and Lazarus, R. (1980).
An analysis of coping in a middle-aged community sample.
Journal of Health and Social Behaviour, 21, 219-239.
- Frankenhauser, M. and Gardell, B. (1975).
Underload and overload in working life: a multidisciplinary approach.
Reports from the Department of Psychology, no. 460,
University of Stockholm, Stockholm.
- Frankenhauser, M. and Gardell, B. (1976).
Underload and overload in working life: outline of a multidisciplinary approach.
Journal of Human Stress, 2. 15-23.
- French, J.R.P. and Caplan, R.D. (1970).
Psychosocial factors in coronary heart disease.
Industrial Medicine, 39, 383-397.
- French, J.R.P. and Caplan, R.D. (1972).
Organizational stress and individual strain.
In: A. Marrow (ed.) *The Failure of Success*.
AMACOM, New York.

- French, J.R.P., Rogers, W. and Cobb, S. (1974).
A model of person-environment.
In: G.W. Coehlo, D.A. Hamburg, and J.E. Adams (Eds) *Coping and Adaptation*.
Basic Books, New York.
- French, J.R.P., Caplan, R.D. and van Harrison, R. (1982).
The mechanism of job stress and strain.
Wiley and Sons, New York.
- French, M.T., Dunlap, L.J., Roman, P.M. and Steele, P.D. (1997).
Factors that influence the use and perceptions of employee assistance programs at six
worksites.
Journal of Occupational Health Psychology, 2(4), 312-324.
- Gallagher-Thompson, D., Hanley-Peterson, P. and Thompson, L.W. (1990).
Maintenance of gains versus relapse following brief psychotherapy for depression.
Journal of Consulting Psychology, 58, 371-374.
- Gam, J., Sauser, W. I., Evans, K. L. and Lair, C. V. (1983).
The evaluation of an employee assistance program.
Journal of Employment Counselling, 20, 99-106
- Gammie, B. (1997).
Employee assistance programs in the UK oil industry: an examination of current
operational practice.
Personnel Review, 26 (1/2), 66-80.
- Ganster, D.C. and Fusilier, M.R. (1989),
Control in the workplace.
In: C.L. Cooper and I. Robertson (Eds): *International Review of Industrial and
Organisational Psychology*.
Wiley and Sons, Chichester.
- Gardell, B. (1973).
Quality of work and Non-work activities and rewards in affluent societies.
Reports from Psychological Laboratories no: 403, University of Stockholm, Stockholm.
- Gardner, B., Rose, J., Mason, O., Tyler, P. and Cushway, D. (2005).
Cognitive therapy and behavioural coping in the management of work-related stress: an
intervention study.
Work and Stress, 19, 137-152.
- Garfield, S.L. (1986).
Research on client variables in psychotherapy.
In S.L. Garfield and A.E. Bergin (Eds.)
Handbook of Psychotherapy and Behaviour Change (Third Edition), pp213-256
New York: Wiley.
- Garfield, S.L. (1989) *The practice of brief psychotherapy*.
New York: Pergamon Press.
- Gelso, C.J. and Johnson, D.H. (1983).
Exploration in time-limited counselling and psychotherapy.
New York: Teachers College Press.

Gergen, K.J. (1991) *The saturated self: Dilemmas of identity in contemporary life*. New York: Basic Books.

Gersons, B.P.R., Carlier, I.V.E., Lamberts, R.D. and van der Kolk, B.A. (2000). Randomized clinic trial of brief eclectic psychotherapy for police officers with posttraumatic stress disorder. *Journal of Traumatic Stress*, 13, 333-347.

Gerstein, L., Moore, D., Duffey, K. and Dainas, C. (1993). The effects of biological sex and ethnicity on EAP utilization and referrals. *Journal of Employment Counselling*, 30, 74-8

Giga, S.I., Noblet, A.J., Faragher, B. and Cooper, C.L. (2003). The UK perspective: a review of research on organisational stress management interventions. *Australian Psychologist*, 38, 158-164.

Googins, B and Kurtz, N (1981). Discrimination participation and non-participating supervisors on occupational alcoholism programs *Journal of Drug Issues* 11, 199-216.

Goss, S. and Mearns, D. (1997). Applied pluralism in the evaluation of employee counselling. *British Journal of Guidance and Counselling*. 25 (3), 327-44.

Gove, W. (1979). Sex, marital status and psychiatric treatment; A research note. *Social Forces*, 58, 89-93.

Gove, W. and Geerken, M. (1977). The effect of children and employment on the mental health of married men and women. *Social Forces*, 58, 66-76.

Gray, P. (1999). *Mental health in the workplace: tackling the effects of stress*. The Mental Health Foundation.

Gray-Toft, P. (1980). Effectiveness of a counselling support program for hospice nurses. *Journal of Counselling Psychology*, 27, 346-354.

Grime, P.R. (2004). Computerized cognitive behavioural therapy at work: a randomized controlled trial in employees with recent stress-related absenteeism. *Occupational Medicine*, 54, 353-359.

Grosch, J.W., Duffy, K.G. and Hessink, T.K. (1996). Employee assistance programs in higher education: factors associated with program usage and effectiveness. *Employee Assistance Quarterly*, 11 (4), 43-57.

- Grossarth-Maticek R.; Bastiaans, J. and Kanazir, D. (1985).
Psychosocial factors as strong predictors of mortality from cancer, ischaemic heart disease and stroke: The Yugoslav prospective study.
Journal of Psychosomatic Research 29, 167-176.
- Guildford, J.P. (1955).
Psychometric Methods
New York: McGraw-Hill
- Guppy, A and Marsden, J. (1997).
Assisting employees with drinking problems: changes in mental health, job perceptions and work performance,
Work and Stress, 11(4), 341-50.
- Gutek, B.A., Repetti, R.L. and Silver, D.L. (1988).
Non-work roles and stress at work.
In: C.L. Cooper and R. Payne (Eds): *Causes, coping and consequences of stress at work*.
Wiley and Sons, Chichester.
- Gyllensten, K., Palmer, S. and Farrants, J. (2005).
Perceptions of stress and stress interventions in finance organisations: overcoming resistance towards counselling.
Counselling Psychology Quarterly, 18, 19-30.
- Hall, E.M (1991).
Gender, work control and stress: a theoretical discussion and an empirical test.
In: J.V. Johnson and G. Johansson (Eds): *The Psychosocial work Environment: Work organization, Democratization and health*.
Baywood Publishing, New York.
- Hall, L. Vacc, N.A. and Kissling, G (1991).
Likelihood to use employee assistance programs: the effects of socio-demographic, social-psychological, social cultural, organizational and community factors.
Journal of Employment Counselling, 28, 63-73.
- Hammond, S.; Lewis, A.M. and Viera, P. (1992).
Stress at Work: A Survey of the Chichester Health Authority Workforce
Dept of Psychology, University of Surrey, Guildford
Chichester Health Libraries, Graylingwell Library, Graylingwell Hospital, College Lane, Chichester, PO19 4PO.
- Hargrave, G.E. and Hiatt, D. (2004).
The EAP treatment of depressed employees: implications for return on investment.
Employee Assistance Quarterly, 19, 39-49.
- Harlow, K. (1987).
A comparison of internal and external employee assistance programs.
New England Journal of Human Services, 7 (2), 6-21.
- Harlow, K.C. (1998).
Employee attitude toward an internal; employee assistance program
Journal of Employment Counselling, 35, 141-50.

- Harris, S.M., Adams, A., Hill, L., Morgan, M. and Solz, C. (2002).
Beyond customer satisfaction: a randomized EAP outcome study.
Employee Assistance Quarterly, 17, 53-61.
- Harvey, D. (1989) The condition of postmodernity.
Oxford: Blackwell.
- Haynes, S. and Feinleib, M. (1980).
Woman, work and coronary heart disease. Prospective findings from the Framingham heart study.
American Journal of Public Health, 70 (20), 133-141.
- Health and Safety Executive (1990).
Mental Health at Work
Medical Division, Health and Safety Executive, London.
- Health and Safety Commission (1992).
Annual Report 1991/92 HMSO London.
- Health and Safety Information Bulletin (1886).
Handling Stress at work.
Industrial Relations Review and Report, Bulletin no. 125, 6th May.
- Health and Safety Executive (2009).
Why tackle work-related stress?
www.hse.gov.uk/stress.
- Highley, JC and Cooper, CL (1993).
Employee Counselling Today, 15 (5) 13-18.
- Highley, J.C. and Cooper, C.L. (1994a).
Evaluating EAPs.
Personnel Review, 23 (7), 46-59.
- Highley, J.C. and Cooper, C.L. (1994b).
An assessment of employee assistance and workplace counselling programmes in British organisations.
Report for the Health and Safety Executive
In J.C Highley and C.L. Cooper (1996): Counselling in the workplace.
In R. Bayne, I. Horton and J. Brimrose (Eds): New Directions in Counselling pp. 107-123
London: Routledge.
- Highley, JC and Cooper, CL (1995a).
An assessment of UK EAPs and workplace counselling programmes (A Health and Safety Executive Funded Project).
Manchester School of Management.
- Highley, JC and Cooper, C.L. (1995b).
An evaluation of British EAPs and workplace counselling programmes
Manchester School of Management UMIST
Hands Executive Project.

- Highley, J.C. and Cooper, C.L. (1996).
Counselling in the workplace.
In R. Bayne, I. Horton and J. Brimrose (Eds): *New Directions in Counselling*, pp 107-123
London: Routledge.
- Highley-Marchington, J.C. and Cooper, C. L. (1997a).
Evaluating and auditing workplace counselling programmes.
In M. Carroll and M. Walton (Eds): *Handbook of Counselling in Organisations*, pp 207-220.
London: Sage.
- Highley-Marchington, J.C. and Cooper, C. L. (1997b).
An evaluation of employee assistance and workplace counselling programmes in the UK.
In M. Carroll and M. Walton (Eds): *Handbook of Counselling in Organisations*, pp 273-287.
London: Sage.
- Highley-Marchington, J.C. and Cooper, C. L. (1998).
An assessment of employee assistance and workplace counselling programmes in British organisations.
Report for the Health and Safety Executive. HSE Books.
- Hingley, P. and Cooper, C.L. (1986).
Stress and the nurse manager.
Wiley and Son, Chichester.
- Hodapp, V.; Neuser, K.W. and Weyer, G. (1988).
Job stress, emotion and work environment.
Personality and Individual Differences. 9, pp. 851-860.
- Hollon, S.D.; Shelton, R.C. and Loosen, P.T. (1991).
Cognitive therapy and pharmacotherapy for depression.
Journal of Consulting and Clinical Psychology, Vol. 59, pp 88-99.
- Holmes, T.H. and Rahe, R.H. (1967).
The social readjustment rating scale
Journal of Psychosomatic Research, Vol. 11, 213-218.
- Holroyd, K.A. and Lazarus, R.S. (1982).
Stress, coping and somatic adaptation.
In: L. Goldberger and S. Breznitz (eds.): *Handbook of Stress: Theoretical and Clinical aspects*.
Free Press, New York.
- Holt, R.R. (1982).
Occupational stress.
In: L. Goldberger and S. Breznitz (eds.): *Handbook of Stress: Theoretical and Clinical aspects*.
Free Press, New York.
- Hopkins, R. (1998).
When is an EAP not an EAP?
Counselling at Work Autumn 1998.

- Horowitz, L.M., Rosenberg, S.E., Baer, B.A., Ureno, G. and Villasenor, V.S. (1988).
Inventory of Interpersonal Problems: Psychometric properties and clinical applications.
Journal of Consulting and Clinical Psychology, 56, 885-892.
- Hoskinson and Reddy (1993).
EAPs and Counselling Provision in UK organisations
ICAS Report and Policy Guide.
- House, J.S. and Wells, J.A. (1978).
Occupational stress, social support and health.
In: A. McLean, G. Black and M. Colligan (Eds): *Reducing Occupational stress: Proceedings of a conference*. DWEH (NIOSH) Publication no: 78-140, 8-29.
- Houston, B.K. and Snyder, C.R. (1988).
Editors: *Type A behaviour: Research, theory and intervention*.
Chichester: John Wiley and Sons.
- Houts, L. M. (1991).
Survey of the current status of cost-savings evaluations in employee assistance programs.
Employee Assistance Quarterly, 7(1), 57-73.
- Howard, K.L.; Kopta, S.M.; Krause, M.J. and Orlinsky, D.E (1986).
The dose-effect relationship in psychotherapy
American Psychologist, 41, 159-164.
- Husby, R. (1985).
Short-term dynamic psychotherapy:3. A 5-year follow-up of 36 neurotic patients.
Psychotherapy and Psychosomatics, Vol. 43, pp.17-22.
- ILO (1986).
Preventing Stress at Work.
Conditions of Work digest, 11, International Labour Office, Geneva.
- Intindola, B. (1991).
EAPs still foreign to many small businesses.
National Underwriter, 95, 21.
- Ivancevich, J. M. and Matteson, M.T. (1980).
Stress and work: A managerial perspective.
Glenview. IL; Scott, Foreman.
- Iwi, D.J., Watson, P. Barber, N., Kimber, and Sharman, G. (1998).
The self-reported well-being of employees facing organisational change: effects of an intervention.
Occupational Medicine 48 (6), 361-9.
- Izraeli, D. (1979).
Sex structure of occupations: The Israeli experience.
Sociology of work and Occupations. 6(4), 404-429.
- Jackson, P.R. and Warr, P.B. (1984).
Unemployment and psychological ill health: the moderating role of duration and age.
Psychological Medicine, 14, 610-614.

- Jackson, S. and Schuler, R.S. (1985).
A meta-analysis and conceptual critique of research on role ambiguity and role conflict in work settings.
Organizational Behaviour and Human Decisions Processes, 36, 16-78.
- Jacobson, N.N.; Follette, W.C. and Revenstorf, D. (1984).
Psychotherapy outcome research: Methods for reporting variability and evaluating clinical significance.
Behavior Therapy, 15, 336-352.
- Jacobson, N.N.; Follette, W.C. and Revenstorf, D. (1986).
Toward a standard definition of clinical significant change.
Behavior Therapy, 17, 308-311.
- Jacobson, N.S. and Revenstorf, D. (1988).
Statistics for assessing the clinical significance of psychotherapy techniques: issues, problems, and new developments.
Behavioral Assessments, 10, 133-145.
- Jacobson, N.S.; Wilson, L. and Trupper, C. (1988).
The clinical significance of treatment gains resulting from exposure-based interventions for agoraphobia: A reanalysis of outcome data.
Behavior Therapy, 19, 539-554.
- Jacobson, N.S. and Truax, P. (1991).
Clinical significance: A statistical approach to defining meaningful change in psychotherapy research.
Journal of Consulting and Clinical Psychology, 59, 12-19.
- James, W. (1955) *Pragmatism and four essays from 'Meaning of Truth'*.
New York: Meriden Books.
- Jenkins, R. (1992).
Prevalence of Mental Illness in the workplace.
In: R. Jenkins and N. Coney (Eds): *Prevention of mental Ill health at work*.
HMSO, London.
- Jenkinson, C.; Layte, R. and Lawrence, K. (1997).
Development and Testing of the Medical Outcomes Study 36-item Short Form Survey Summary Scale Scores in the United Kingdom.
Results from a large-scale clinical trial.
Medical Care, 35 (4), 410-416.
- Jerrell, J.M and Rightmyer, JF (1982).
Evaluating EAP; A review of methods, outcomes and future directions.
Evaluation and Program Planning, 5, 255-267.
- Jick, T.D. and Mitz, L.F. (1985).
Sex differences in work stress.
Academy of Management Review, 10 (3), 408 – 20.
- Johnson, D.H. and Gelso, C.J. (1980).
The effectiveness of time limits in counselling and psychotherapy. A critical review.
Counselling Psychologist, 9, 70-83.

- Johnson, P. (1982).
Sex differences, women's roles, and alcohol use. Preliminary national data.
Journal of Social Issues, 38 (2), 93-118.
- Jones, J.W., Barge, B.N., Steffy, B.D., Fay, L.M., Kunz, L.K. and Wuebker, L.J. (1988).
Stress and medical malpractice: organizational risk assessment and intervention.
Journal of Applied Psychology, 73, 727-735.
- Kahn, R.L. (1973).
Conflict, ambiguity and overwork: three elements in job stress.
Occupational Mental Health, 31, 2-9.
- Kahn, R.L., Wolfe, D.M., Quinn, R.P., Snoek, J.D. and Rosenthal, R.A. (1964).
Organisational stress: Studies in role conflict and ambiguity.
Wiley and Sons, New York.
- Kahn, R.L. and Byosiére, S. (1990).
Stress in organizations.
In: M. Dunnette (Ed): *Handbook of Industrial and Organizational Psychology*.
Rand McNally, Chicago.
- Kahn, R.L. and French, J.R.P. (1970).
Status and conflict: two themes in the study of stress.
In: J.E. McGrath (ed.) *Social and Psychological Factors in Stress*.
Holt, Rinehart and Winston, New York.
- Kalleberg, A.L. and Loscocco, K.A. (1983).
Aging, values and rewards: Explaining age differences in job satisfaction.
American Sociological Review, 48, 78-90.
- Kanter, R.M. (1977).
Work and family in the United States: a critical review and agenda for research and policy.
Russell Sage Foundation, New York.
- Karasek, R.A. (1979).
Job demands, job decisions latitude and mental strain: implications for job redesign.
Administrative Science Quarterly, 24, 285-308.
- Karasek, R.; Lindell, J. and Gardell, B. (1981).
Patterns of health in association with job and non-job stressors for Swedish white collar workers.
Working paper. Columbia University, New York.
- Karasek, R.A., Schwartz, J. and Theorell, T. (1982).
Job characteristics, occupation, and coronary heart disease.
(Final report on Grant No R-01-OH00906)
Cincinnati, OH: National Institute for Occupational Safety and Health.
- Karasek, R.A. and Theorell, T. (1990).
Healthy Work: Stress, Productivity and the Reconstruction of working Life.
Basic Books, New York.

- Kasl, S.V. (1980).
Epidemiological contributions to the study of work stress.
In: C.L. Cooper and R. Payne (eds.) Stress at work.
Wiley and Sons, Chichester.
- Kasl, S.V. (1992).
Surveillance of psychological disorders in the workplace.
In: G.P. Keita and S.L. Sauter (eds.) Work and Well-Being: An agenda for the 1990s.
American Psychological Association, Washington DC.
- Kasl, S.V. and Cobb, S. (1982).
The experience of losing a job: some effects on cardiovascular functioning.
Psychotherapy and Psychosomatics, 34, 88-109.
- Katzman, M.S. and Smith, Kenneth, J. (1989).
Evaluation of Occupational Health Promotion programmes
Employee assistance Quarterly, 4(3), 27-46.
- Kazdin, A.E. (1994),
Methodology, design, and evaluation in psychotherapy research.
In A.E. Bergin and S.L. Garfield: Handbook of psychotherapy and Behavior Change (4th ed.) pp 19-71
New York: Wiley.
- Kearns, J. (1986).
Stress at work: the challenge of change.
BUPA series: The management of health: 1. Stress and the city.
BUPA.
- Kessler, R. and McRae, J. (1981).
Trends in the relationship between sex and psychological distress: 1957-1976
American Sociological Review. 46, 443-452.
- Kiev, A. and Kohn, V. (1979).
Executive Stress.
New York, Amacon.
- Kinder, A.; Hughes, R. and Cooper, C.L (2008)
Adapting to Change.
In: A. Kinder, R. Hughes and C.L. Cooper (Eds): Employee Well-Being Support – A
Workplace Resource.
John Wiley and Sons, Ltd
- Klarreich, S. H., DiGiuseppe, R. and DiMattia, D. J. (1987).
Cost effectiveness of an employee assistance program with rational emotive therapy,
Professional Psychology Research and Practice, 18, 140-4.
- Klarreich, S.H.; Francek, J.L. and Moore, C.E. (1985).
The Human Resources Management Handbook: Principles and practice of Employee
Assistance Programs.
New York: Praeger.

- Klauer, T.; Filipp, S.H. and Ferring, D. (1989).
The 'Inventory to assess forms of coping': Scale development and first results pertaining to reliability, validity and stability.
Diagnostica, 35, 316-335.
- Klosko, J.S.; Barlow, D.H.; Tassinari, R. and Cerny, J.A. (1990).
A comparison of alprazolam and behaviour therapy in treatment of panic disorder.
Journal of Consulting and Clinical Psychology, 58, 77-84.
- Kobasa, S. (1979).
Stressful life events, personality and health: an inquiry into hardiness.
Journal of Personality and Social Psychology, 37, 1-13.
- Kobasa, S. and Puccetti, M. (1983).
Personality and social resources in stress resistance.
Journal of Personality and Social Psychology, 45, 839-850.
- Kobasa, S., Maddi, S. and Courington, S. (1981).
Personality and constitution as mediators in the stress-illness relationship.
Journal of Health and Social Behaviour, 22, 368-378.
- Kobasa, S., Maddi, S. and Kahn, S. (1982).
Personality and constitution as mediators in the stress-illness relationship.
Journal of Health and Social Behaviour, 42, 168-177.
- Kopta, S.M.; Howard, K.I.; Lowry, J.L. and Beutler, L.E. (1994).
Patterns of symptomatic recovery in psychotherapy.
Journal of Consulting and Clinical Psychology, Vol. 62, pp 1009-1016.
- Kornhauser, A. (1965).
Mental Health of the Industrial Worker.
University of Chicago Press, Chicago, Illinois.
- Koss, M.P. and Butcher, J.W. (1986).
Research on Brief psychotherapy.
In S.L. Garfield and A.E. Bergin (Eds): *Handbook of Psychotherapy and Behavior Change* (3rd Ed), pp. 627-670.
New York: Wiley.
- Koss, M.P. and Shiang, J. (1994).
Research on Brief Therapy.
In S.L. Garfield and A.E. Bergin (Eds): *Handbook of Psychotherapy and Behavior Change* (4th Ed), pp. 664-700.
New York: Wiley.
- Kroes, W.H. (1976).
Society's victim, the policeman: an analysis of job stress in policing.
Thomas, Springfield.
- Krohne, H.W. (1993).
Vigilance and cognitive avoidance as concepts in coping research.
In H.W. Krohne (Ed.), *Attention and avoidance: Strategies in coping with aversiveness* (pp 19-50).
Seattle: Hogrefe and Huber.

- Krohne, H.W.; Schumacher, A. and Egloff, B. (1992).
The Mainz Coping Inventory (MCI).
Mainz: Johannes-Gutenberg-Universität, Psychologisches Institut.
- Kuhn, T.S. (1962) The structure of scientific revolutions
2nd ed. Chicago: university of Chicago Press.
- Kurtz, N.R.; Googins, B and Howard, WC (1984).
Measuring the success of occupational alcoholism program.
Journal of Studies on Alcohol, 45, 33-45.
- Kuntz, R. and Oxman, A.D. (1998).
The unpredictability paradox: review of empirical comparisons of randomised, and non-randomised, clinical trials.
British Medical Journal, 317, 1185-1190.
- Lala Ashenberg Strausser S. (1988).
A Comparative Analysis of In-house and contractual Employee Assistance Programs
Employee Assistance Quarterly Vol. 3, nos 3/4 1988.
- Lambert, M.J., Shapiro, D.A and Bergin, A.E. (1986).
The effectiveness of psychotherapy.
In: S.L. Garfield and A.E. Bergin (Eds): Handbook of Psychotherapy and Behavioural Change.
New York, Wiley.
- Lambert, M.J. and Bergin, A.E. (1994).
The effectiveness of psychotherapy.
In A.E. Bergin and S.L. Garfield (eds.) Handbook of psychotherapy and behaviour change.
New York: Wiley.
- Lambert, M.J.; Hansen, N.B. and Finch, A.E. (2001).
Patient-focussed research: using patient outcome data to enhance treatment effects.
Journal of Consulting and Clinical Psychology, 69, 159-172.
- Lambert, M.J. and Ogles, B.M. (2004).
The efficacy and effectiveness of psychotherapy.
In M.J. Lambert (Ed.): Bergin and Garfield; Handbook of psychotherapy and behavior change.
New York: Wiley.
- Lansbergis, P.A. (1988).
Occupational stress among health care workers: A test of the job demands-control model.
Journal of Organisational Behaviour. 9, 217-239.
- Larson, JH, Wilson, S.M and Beley, R , (1988).
The assessment of family wellness in a university employee wellness program.
American Journal of Health Promotion, Winter, 2 (3), 20-30.
- Larwood, L. and Wood, M.M. (1979).
Women in Management.
Lexington Books, London.

- Laux, L. and Weber, H. (1993).
Coping with emotions, and self-presentation.
Stuttgart: Kohlhammar.
- Lazarus, R.S. (1966).
Psychological stress and coping process.
McGraw-Hill, New York.
- Lazarus, R.S. (1976).
Patterns of adjustment
McGraw-Hill, New York.
- Lazarus, R.S. (1991).
Emotion and adaptation.
London: Oxford University Press.
- Lazarus, R.S. and Folkman, S. (1984).
Stress, appraisal and coping.
Springer Publications, New York.
- Lelliot, P.T.; Marks, I.M.; Monterio, W.O.; Tsakiris, F. and Noshirvani, H. (1987).
Agoraphobics 5 years after imipramine and exposure.
Journal of Nervous and Mental Disease, Vol. 175, pp 599-605.
- Lerner, D.J.; Levine, S.; Malpeis, S. and Dagostino, R.B. (1994).
Job strain and health-related quality of life in national sample.
American Journal of Public Health, 84 (10), 1580-1585.
- Levi, L. (1992).
Psychosocial, occupational, environmental, and health concepts, research results and applications.
In: G.P. Keita and S.L. Sauter (Eds): Work and Well Being: an agenda for the 1990s.
American Psychological Association, Washington DC.
- Levenson, H.; Hirschfield, M.; Hirschfield, A. and Dubai, B. (1983).
Recent life events and accidents: The role of sex differences.
Journal of Human Stress, 4-11.
- Levenson, H., Speed, J, and Budman, S.H. (1995).
Therapist experience, training and skill in brief therapy: A bicoastal survey.
American Journal of Psychotherapy Research, Vol. 49 (1), 95-117.
- Lieberman, R.P. ed. (1992). Handbook of psychiatric rehabilitation.
New York: Elsevier.
- Lief A. (1948).
(Ed) The commonsense psychiatry of Dr Adolf Meyer.
McGraw-Hill, New York.
- Lippe, K. (1990).
Compensation for mental health claims under Canadian law.
Behavioural Sciences and the Law, 8, 398-399.

- Luborsky, L.; Crits-Christoph, P.; McLellan, T.; Woody, G.; Piper, W.; Liberman, B.; Imber, S. and Pilkonis, P. (1986).
Do therapists vary much in their success? Findings from four outcome studies.
American Journal of Orthopsychiatry, 56, 501-512.
- Luborsky, L.; Woody, G.; McLellan, T.; O'Brien, C.P. and Auerbach, A. (1985).
Therapist success and its determinants.
Archives of General Psychiatry, 42, 602-611.
- Luborsky, L.; Barber, J.P. and Crits-Christoph, P. (1990).
Theory based research for understanding the process of dynamic psychotherapy.
Journal of Consulting and Clinical Psychology, 58, 281-287.
- Lueger, R.J. and Howard, K. I. (1994).
Reliable improvements in life functioning of psychotherapy patients'
Unpublished paper, available from Dr R Leuger, Dept of Psychology, Marquette University, USA.
- Lundberg, U. and Forsman, L. (1979).
Adrenal medullary and adrenal cortical responses to under stimulation and over stimulation: comparison between type A and type B persons.
Biological Psychology, 9, 79-89.
- Macdonald, S., Lothian, S. and Wells, S. (1997).
Evaluation of an employee assistance program at a transportation company.
Evaluation and Program Planning, 20 (4), 495-505.
- Mahoney, M.J. (1991) *Human change processes: The scientific foundations of psychotherapy*.
New York: Basic Books.
- Malan, D.H. (1976).
The frontier of brief psychotherapy
New York, Plenum.
- Mandler, G. (1982).
Stress and thought processes
In: L. Goldberg and S. Breznitz (Eds): *Handbook of stress: Theoretical and clinical aspects*.
Free Press, New York.
- Margolis, B.L. and Kroes, W.H.(1974).
Work and the health of man.
In: J. O'Toole (Ed): *Work and the Quality of Life*.
MIT Press, Cambridge, Mass.
- Margolis, B.L., Kroes, W.H. and Quinn, R.P. (1974).
Job Stress: an unlisted occupational hazard.
Journal of Occupational Medicine, 16, 652-661.
- Margolis, J. (1986) *Pragmatism without foundations: Reconciling realism and relativism*.
New York: Basil Blackwell.

- Marmot, M. G. and Madge, N. (1987).
An epidemiological perspective on stress and health.
In: S.V. Kasl and C.L. Cooper (Eds): Stress and health: Issues in research methodology.
Wiley and Sons, Chichester.
- Marmot, M. (2004).
Status Syndrome: how your social standing directly affects your health.
London: Bloomsbury.
- Marshall, J. (1977).
Job pressures and satisfactions at managerial levels.
Unpublished PhD thesis,
University of Manchester Institute of Science and Technology, Manchester.
- Masi, D.A. (1984).
Designing Employee Assistance Programs.
New York: AMACOM 1.
- Masi, D.A. and Goffs (1987).
Evaluation of an Employee Counselling Services Program for the US Department of Health
In: D.A. Masi: Evaluating your Employee Assistance and Managed Behavioural Care
Program
1994.
Performance Resources Press, Inc, Troy MI 48083-4244.
- Maslach, C. (1982).
Burnout
New York, Prentice Hall Press.
- Matteson, M.T. and Ivancevich, J.M. (1987).
Controlling work stress.
London: Jossey-Bass.
- May, K.M. (1992).
Referrals to employee assistance programs: a pilot analogue study of expectations about
counselling.
Journal of Mental Health Counselling, 14 (2), 208-224.
- Maynard, M (1986).
Measuring work and support network satisfaction
Journal of Employment Counselling March, 23 (1), 9-19.
- McAllister, P. O. (1993).
An evaluation of counselling for employer-referred problem drinkers,
Health Bulletin, 51(5), 285-294.
- McClellan, K. (1989).
Cost benefit analysis of the Ohio EAP
Employee Assistance Quarterly, 5 (2), 67-85.
- McClellan, K. and McClellan, M. (1987).
The dark side of mega trends.
Employee Assistance Quarterly, 2, 1-21

- McClellan, K. and Miller, R.E. (1988).
EAPs in Transition: Purpose and Scope of Services
Employee Assistance Quarterly 3, (3/4).
- McCrae, R.R. and Costa, R.T. (1984).
Situational determinants of coping responses: Loss, threat and challenge.
Journal of Personality and Social Psychology, 46, 919-928.
- McCrae, R.R. and Costa, R.T. (1986).
Personality, coping and coping effectiveness in an adult sample.
Journal of Personality, 54, 385-405.
- McDonnell Douglas Corporation (1989).
Corporation's EAP produces hard data. The Almacan, August, 1986
Cited by J.C. Highley and C.L. Cooper (1994) Evaluating EAPs
Personnel Review, 23 (7), 46-59.
- McHugh, M and Brennan, S, (1992).
Organization development and total stress management
Leadership and Organization Development Journal, 13(1). 27-32.
- McLeod, J. (1993).
From Freud to brief therapy: Themes and issues in the psychodynamic counselling approach.
An Introduction to Counselling.
Buckingham: Open University Press.
- McLeod, J. (2001).
Counselling in the workplace: the facts. A systematic study of the research evidence.
Rugby: BACP.
- McLeod, J. (2007).
Counselling in the workplace: a comprehensive review of the research evidence -2nd edition. Lutterworth: BACP.
- McLeod, J. and Cooper, D. (1992).
A Study of Stress and Support in the Staffordshire Fire and Rescue Service
Centre for counselling Studies
Dept of Applied Social Studies
Keele University.
- Meichenbaum, D. (1977).
Cognitive-Behaviour Modification
Plenum Press, New York.
- Meier, A. (2002).
An online stress management support group for social workers.
Journal of Technology in Human Services, 20, 107-132.
- Millar, A. (2002).
Beyond resolution of presenting issues: experiences of an in-house police counselling service. Counselling and Psychotherapy Research, 2, 159-166.

- Miller, S.M. (1987).
Monitoring and blunting: Validation of a questionnaire to assess styles of information seeking under threat.
Journal of Personality and Social Psychology, 52 (2), 345-353
- Miller, S.M.; Combs, C. and Kruus, L. (1993).
Tuning in and tuning out: Confronting the effects of confrontation.
In H.W. Krohne (Ed.), *Attention and avoidance: Strategies in coping with aversiveness* (pp 51-70).
Seattle: Hogrefe and Huber.
- Milne, S.H., Blum, T.C. and Roman, P.M. (1994).
Factors influencing employees' propensity to use an employee assistance program.
Personnel Psychology, 47 (1), 123-145.
- Mintz, J.; Mintz, L.I.; Arruda, A.J. and Hwang, S.S. (1992).
Treatments of Depression and the functional capacity to work
Archives of General Psychiatry, 49, 761-768.
- Mitchie, S. (1996).
Reducing absenteeism by stress management. Valuation of a stress counselling service.
Work and Stress. 10 (4), 367-372.
- Mind (1993).
Cost of mental health in the workplace
National Association for Mental Health, Harley St London.
- Morrow-Bradley, C. and Elliot, R. (1986) Utilization of psychotherapy research by practicing psychotherapists.
American Psychologist, 41:188-206.
- Mullin, T.; Barkham, M., Mothersole, G.; Bewick, B.M. and Kinder, A. (2006).
Recovery and Improvement benchmarks for counselling and the psychological therapies in routine primary care.
Counselling and Psychotherapy Research, March, 6(1), 68-80.
- Murphy, L.R. (1989).
Causes, coping and consequences of stress at work.
In Cooper and Payne (Eds): *Causes, coping and consequences of stress at work*.
Chichester: Wiley.
- Nadolski, J. N. and Sandonato, C. E. (1987).
Evaluation of an employee assistance programme,
Journal of Occupational Medicine, 29 (1), 32-37.
- Nagpal, R. and Sell, H. (1985).
Subjective Well-Being.
World Health Organisation.
Searo Regional Health Papers No7.
- Nash, P. (2006).
Teamwork: The Newsletter for supporters of the Teacher Support Network.
Spring 2006.

- Neary, J., Elliot, K.V. and Toohey, J. (1992).
The causes of workplace stress and strategies for management.
Paper presented at the International Symposium on work-related Diseases: Prevention and Health Promotion, Linz, Austria.
- Neufeld, R.W.J. and Paterson, R.J. (1989).
Issues concerning control and its implementation.
In: R. W. J Neufeld (Ed): Advances in the investigation of psychological stress.
Wiley and Sons, New York.
- Nichol, D.K. and Bacon, A.D. (1992).
Managing mental health problems for a large workforce
In: R. Jenkins and N. Coney (Eds): Prevention of mental ill health at work.
CBI conference 1991 London: HMSO.
- Nicolas, D. and Bayne, R (1996).
Coping skills and heart disease.
Unpublished research – University of East London.
- Nowack, K.M. (1991).
Psychological predictors of health status.
Work Stress, 5, 117-131.
- Nunnally, J.C. (1978).
Psychometric Theory
New York: McGraw-Hill.
- Oher, JM (1993).
Survey research to measure EAP customer satisfaction: A quality improvement tool
Employee Assistance Quarterly 8, 41-75.
- Olfson, M. and Pincus, H. (1994).
Outpatient psychotherapy in the United States, II: Patterns of Utilisation.
American Journal of Psychotherapy, 151, 1289-1294.
- O'Malley, S.S.; Foley, S.H.; Rounsaville, B.J.; Watkins, J.T.; Sotsky, S.M.; Imber, S.D. and Elkin, I. (1988).
Therapist competence and patient outcome in interpersonal psychotherapy of depression.
Journal of Consulting and Clinical Psychology, 55, 156-161.
- Palmer, S. (1989).
Occupational Stress.
The Health and Safety Practitioner (August), 16-18.
- Park, DA, (1992).
Client satisfaction evaluation: University Employee Assistance program.
Employee assistance Quarterly, 8(2), 15-34.
- Parker, J.D.A. and Endler, N.S. (1992).
Coping with coping assessment: A critical review.
European Journal of Personality, 6(5), 321-344.
- Parry, G.; Shapiro, D.A. and Firth, J. (1986).
The case of the anxious executive: a study from the research clinic.

British Journal of Medical Psychology, 59, 221-233.

Pavlov, I.P. (1927) Conditioned Reflexes.
New York: Dover.

Payne, R. and Fletcher, B. (1983).
Job demands, supports and constraints as predictors of psychological strain among school teachers.
Journal of Vocational Behaviour, 22, 136-147.

Pearlin, R. and Schooler, C. (1978).
The structure of coping.
Journal of Health and Social Behaviour, 19, 2-21.

Pearse, R. (1977).
What managers think about their managerial careers.
AMACOM, New York.

Pelletier, K.R. and Lutz, R (1988).
Healthy people-healthy business: A critical review of stress management programs in the workplace.
American Journal of Health Promotion Winter, 2(3), 5-12.

Pelletier, K.R. and Lutz, R (1989).
Mindbody goes to work: a critical review of stress management programs in the workplace.
Special Issue: Mind-body health at work.
Advances; Spring, 6(1), 28-34.

Perrez, M. and Reicherts, M. (1992).
Stress, coping and health.
Seattle/Toronto : Hogrefe and Huber Publishers.

Perterson, D.R. (1991) Connection and disconnection of research and practice in the education of professional psychologists.
American Psychologist, 46, 422-429.

Philips, S.B. (2004).
Client satisfaction with university Employee Assistance Programs.
Employee Assistance Quarterly, 19, 59-70.

Polkinghorne, D.E. (1992) Postmodern epistemology of practice.
In S.Kvale, ed. Psychology and postmodernism, 146-165. Newbury Park, CA: Sage.

Popper, K.R. (1959) The logic of scientific discovery.
London: Hutchison.

Poverny, L.M. and Dodd, S.J. (2000).
Differential patterns of EAP service utilization: a nine year follow-up study of faculty and staff. Employee Assistance Quarterly, 15(4), 29-42.

Quick, J.C. and Quick, J.D. (1984).
Organisational stress and preventative management
New York: McGraw-Hill.

- Quine, W.V.O. (1981) Theories and things.
Cambridge, MA: Belknap Press of Harvard University Press.
- Quinn, R.P. and Shepard, L.J. (1974).
Quality of Employment Survey
Institute for Social Research,
University of Michigan, Ann Arbor.
- Rahe, R.H. (1969).
Multi-cultural correlations of life change scaling: America, Japan, Denmark and Sweden.
Journal of Psychosomatic Research, 13, 191-195.
- Rahe, R.H., Meyer, M. Smith, M., Kjaer, G. and Holmes, T.H. (1964).
Social stress and illness onset.
J. Psychosom. Res. 8, 35 (1964).
- Ramanathan, CS (1990).
Stress and Job Satisfaction: Implications for Occupational social work
Employee Assistance Quarterly 1990 Vol. 6(2) 27-39.
- Reddy, M. (1992).
Counselling – its value to the business
In: Eds R. Jenkins and N. Coney Prevention of Mental Ill Health at Work
CBI conference 1991 London: HMSO.
- Reddy, M. (1994).
EAPs and their Future in the UK. History Repeating Itself?
Personnel Review, 23 (7), 60-78.
- Rees, D. and Cooper, C.L. (1990).
Occupational Stress in Health Service Employees
Health Services Management Research, 3 (3), 163-172.
- Rees, D. and Cooper, C.L. (1992a).
The Occupational Stress Indicator locus of control scale: should this be regarded as a state rather than trait measure?
Work and Stress, 6 (1), 45-48.
- Rees, D. and Cooper, C.L. (1992b).
Occupational stress in health service workers in the UK.
Stress Medicine, 8, 79-90
- Reppetti, R.L. (1987).
Linkages between work and family roles.
Applied Social Psychology Annual, 7, 98-127.
- Repetti, R.L. and Crosby, F. (1984).
Gender and depression: exploring the adult role explanation.
Journal of Social and Clinical Psychology, 2, 57-70.
- Repetti, R.L., Matthews, R.A. and Waldron, I. (1989).
Employment and women's health: effects of paid employment on women's mental and physical health.
American Psychologist, 44, 1394-1401.

- Reynolds, S. (1997).
Psychological well-being at work: is prevention better than cure?
Journal for Psychosomatic Research, 43 (1), 93-102.
- Rizzo, J.R.; House, R.J. and Lirtzman, S.I. (1970).
Role conflict and ambiguity in complex organisations
Administrative Science Quarterly – 15, pp. 150-163.
- Robinson, D. (1999).
Attitudes to Personnel Professionals to Counselling
Counselling at Work Spring 1999.
- Robertson, I.R. and Cooper, C.L. (1983).
Human Behaviour in Organisations.
MacDonald and Evans Ltd, London.
- Robertson, I.T.; Cooper, C.L. and Williams, J. (1990).
The validity of the occupational stress indicator.
Work Stress. 4, 29-39.
- Rogers, D.; McLeod, J. and Sloboda, J. (1995).
Counsellor and client perceptions of the effectiveness of time-limited counselling in an occupational counselling scheme.
Counselling Psychology Quarterly, 8 (3), 221-231.
- Roman, P and Trice, H. (1976).
Alcohol abuse and work organisations.
In B. Kissin and H. Begleiter (Eds): *Social aspects of alcoholism*.
New York: Plenum Press.
- Rorty, R. (1979) *Philosophy and the mirror of nature*.
Princeton, NJ: Princeton University Press.
- Rorty, R. (1991) *Objectivity, relativism, and truth*.
New York: Cambridge University Press.
- Rosenfield, S. (1980).
Sex differences in depression: Do women always have higher rates?
Journal of Health and Social Behaviour., 21, 33-42.
- Rosenthal, R. and Rosnow, R.L. (1975).
The Volunteer Subject
New York; Wiley.
- Rosenthal, R. and Rosnow, R.L. (1991).
Essentials of Behavioral Research; Methods and Data Analysis, 2nd ed.
New York; McGraw-Hill.
- Rost, K., Fortney, J. and Coyne, J. (2005).
The relationship of depression treatment quality indicators to employee absenteeism.
Mental Health Services Research, 7, 161-168.

- Rost, K., Smith, J.L. and Dickinson, M. (2004).
The effect of improving primary care depression management on employee absenteeism and productivity: a randomized trial.
Medical Care, 42, 1201-1210.
- Rotter, J.B. (1966).
Generalized expectations for internal vs external locus of control of reinforcement.
Psychological Monographs: General and Applied, 80 (whole No 80).
- Rowland, N. (2007).
BACP and NICE.
Therapy Today, 18 (5), 27-30.
- Rowland, N. and Goss, S. (2000).
Evidence-based counselling and psychological therapies: research and applications.
London: Routledge.
- Royce, J.E. (1981).
Alcohol Problems and alcoholism: A Comprehensive Survey.
New York: Free Press, 1981.
- Sackett, D.L.; Straus, S.E.; Richardson, W.S.; Rosenberg, W. and Haynes, R.B. (200).
Evidence based medicine: How to practice and teach
EBM (2nd ed.). London: Churchill Livingstone.
- Saroja, K.I., Ramphal, K.G., Kasmini, K., Ainsah, O., and Baker, O.C. (1999).
Trends in absenteeism rates following psychological intervention – preliminary results.
Singapore Medical Journal, 40 (5) 349 – 351.
- Sauter, S.L., Hurrell, J.J. and Cooper, C.L. (1989).
Job Control and Worker Health.
Wiley and Sons, Chichester.
- Sauter, S.L., Murphy, L.R. and Hurrell, J.J. (1992).
Prevention of work related psychological disorders: a national strategy proposed by the
National Institute for Occupational Safety and Health (NIOSH).
American Psychologist, 45, 146-158.
- Schön, D.A. (1983) The reflective practitioner: How professionals think in action.
New York: Basic Books.
- Schonpflug, F. and Battmann, A. (1988).
The costs and benefits of coping
In: G.P. Keita and S.L. Sauter (eds.) Work and Well Being: An agenda for the 1990s.
American Psychological Association, Washington DC.
- Schwarzer, R. and Schwarzer, C. (1996).
A Critical Survey of Coping Instruments.
In: M. Zeidner and N.S. Endler (eds.). Handbook of Coping (1996)
New York: Wiley.

- Scott, R. and Howard, A. (1970).
Models of stress.
In: S. Levine and N. Scotch (Eds): Social stress.
Aldine, Chicago.
- Sells, S. B. (1970).
On the nature of stress.
In: J. McGrath (Ed): Social and psychological factors in stress.
Holt, Rinehart and Winston, New York.
- Selvik, R., Stephenson, D., Plaza, C. and Sugden, B. (2004)
EAP impact on work, relationship and health outcomes.
Journal of Employee Assistance, 21, 18-22.
- Selye, H. (1956).
Stress of Life
McGraw-Hill, New York.
- Selye, H. (1976).
Stress in health and disease..
Butterworths, Boston.
- Sennett, R. (1998).
The Corrosion of Character: the personal consequences of work in the new capitalism.
New York: W.W. Norton.
- Shadish, W.R.; Navarro, A.M.; Matt, G.E. and Phillips, G. (2000).
The effects of psychological therapies under clinically representative conditions: a meta analysis.
Psychological Bulletin, 126, 512-529.
- Shakespeare-Finch, J. and Scully, P. (2004.)
A multi-method evaluation of an Australian emergency service employee assistance program.
Employee Assistance Quarterly, 19, 71-91.
- Shapiro, D.A. and Firth, J. (1987).
Prescriptive vs. exploratory psychotherapy. Outcomes of the Sheffield psychotherapy project.
British Journal of Psychiatry, 151, 790-799.
- Shapiro, D.A. and Firth-Cozens, J.A (1990).
Two year follow-up of the Sheffield psychotherapy project.
British Journal of Psychiatry, 157, 389-391.
- Shapiro, D.A., Barkham, M., Hardy, G.E and Morrison, L. (1990).
The Second Sheffield Psychotherapy Project: Rationale, design and preliminary outcome data.
British Journal of Medical Psychology, 93, 97-108.
- Shapiro, D.A., Barkham, M., Rees, A., Hardy, G.E., Reynolds, S. and Sartup, M. (1994).
Effects of treatment duration and severity of depression on the effectiveness of cognitive-behavioural and psychodynamics-interpersonal psychotherapy.
Journal of Consulting and Clinical Psychology, 62 (3), 522-534.

Shapiro, D.A., Barkham, M., Hardy, G.E., and Morrison, L.A. (1990).
The second psychotherapy project: rationale, design and preliminary outcome data.
British Journal of Medical Psychology, 63, 97-108.

Sharar, D. and Hertenstein, E. (2004).
Perspectives on the integration of employee assistance and work-life programs: A survey
of key informants in the EAP field.
Journal of Workplace Behavioral Health, 20, 95-104.

Shepherd, M.; Cooper, B.; Brown, A.C. and Kalton, G. (1966).
Psychiatric Illness in General Practice.
Oxford University Press, London.

Sifneos, P.E. (1972).
Short-term Psychotherapy and Emotional Crisis
Cambridge, MA, Harvard University Press.

Skinner, B.F. (1953) Science and Human Behaviour.
New York Macmillan.

Sleeper, R.D. (1975).
Labour mobility over the life cycle.
British Journal of Industrial Relations, 13.

Sloane, R.B.; Staples, F.R.; Cristol, A.H., Yorkston, N.J. and Whipple, K. (1975).
Psychotherapy vs. Behavior Therapy.
Cambridge, M.A.: Harvard University Press.

Sloboda, J.A.; Hopkins, J.S.; Turner, A.; Rogers, D. and McLeod, J. (1993).
An evaluated staff counselling programme in a public sector organisation
Employee Counselling Today, 5 (5), 10-16.

Smith, M.L.; Glass, G.V. and Miller, T. (1980) The benefits of psychotherapy.
Baltimore, MD: John Hopkins University Press.

Smith, T.W. and Pope, M.K. (1991).
Cynical hostility as a health risk: Current status and future directions.
In Strube M.J. (Eds.) Type A Behaviour.
London: Sage.

Spangenberg, J. and Campbell, M.E. (1999).
Anxiety, depression and coping strategies in recently detoxified alcoholics.
Alcoholism Treatment quarterly, 17 (3), 55-65.

Spector, P.E. (1986).
Perceived control by employees: a meta analysis of studies concerning autonomy and
participation in decision making.
Human Relations, 39, 1005-1016.

Sprang, G. (1992).
Utilizing a brief EAP-based intervention as an agent for change in the treatment of
depression.
Employee Assistance Quarterly Vol. 8(2) 57-65.

- Stainbrook, G.L. and Green, L.W. (1983).
Role of psychosocial stress in cardiovascular disease.
Houston Heart Bulletin, 3, 1-8.
- Steenberger, B.N. (1992).
Towards science-practice integration in brief counselling and therapy,
Counselling Psychologist, 20, 403-450.
- Step toe, A. and Appels, A. (1989).
Stress, Personal Control and Health.
Wiley, Chichester.
- Stern, M.J. (1988).
Economic change and social welfare: Implications for Employees Assistance Programmes.
Employee Assistance Quarterly, 3, (3/4).
- Stewart, R. (1976).
Contrasts in management.
McGraw-hill, New York.
- Stiles, W.B; Shapiro, D.A. and Elliot, R. (1986).
'Are all Psychotherapies Equivalent?'
American Psychologist 41 (2), 165-180.
- Straussner, S.L.A. (1988).
Comparison of in-house and contracted-out employee assistance programs.
Social Work, 33, 53-55.
- Svartberg, M. and Stiles, T.C. (1991).
Comparative effects of short-term psychodynamic psychotherapy: A meta-analysis.
Journal of Consulting and Clinical Psychology, Vol. 59, pp 704-714.
- Szabo, S., Maull, E.A. and Pirie, J. (1983).
Occupational Stress: understanding, recognition and prevention.
Experientia, 39, 1057-1180.
- Tehrani, N. (1997).
Internal counselling provision for organisations.
In M. Carroll and M. Walton (Eds): Handbook of Counselling in Organisations, pp 288-307.
London: Sage.
- The Mental Health Foundation (2002).
Out at work, a survey of experiences of people with mental health problems in the workplace.
London: The Mental Health Foundation.
- The Mental Health Foundation (2005).
Fundamental facts.
London: The Mental Health Foundation.
- Toulmin, S. (1990) Cosmopolis: The hidden agenda of modernity.
Chicago: university of Chicago press.

- Trice, H.M. and Roman (1972).
Spirits and demons at work: alcohol and other drugs on the job.
Ithaca, NY: Cornell University Press.
- Trubshaw, E.A. and Dollard, M.F. (2001).
Representation of work stress in an Australian public hospital.
AAOHN Journal, 49, 437-444.
- Trull, T.J., Nietziel, T. and Main, A. (1988).
The use of meta-analysis to assess the clinical significance of behaviour therapy for agoraphobia.
Behavior Therapy, 19, 527-538.
- Uris, A. (1972).
How managers ease job pressures.
International Management, June, 45-46.
- Van Dierendonck, D.; Schaufeli, W.B.; and Buunk, B.P. (1998).
The evaluation of an individual burnout program: the role of inequity and social support.
Journal of Applied Psychology, 83, 392-407
- Van der Klink, J.J.L., Blonk, R.W.B., Schene, A.H. and van Dijk, F.J.H. (2001).
The benefits of interventions for work-related stress.
American Journal of Public Health, 91, 270-276.
- Van der Klink, J.J.L., Blonk, R.W.B., Schene, A.H. and van Dijk, F.J.H. (2003).
Reducing long term sickness absence by an activating intervention in adjustment disorders: a cluster randomized controlled design.
Occupational and Environmental Medicine, 60, 429-437.
- Van Sell, M. (1980).
What can women do about stress: Living with a double-bind.
Paper presented at the meeting of the Eastern Academy of Management.
Buffalo. NY.
- Vonachen, H.A., Mason, J.M. and Kroneberg, M.H. (1954).
Study of five years of employee counselling in an industrial medical program.
Archives of Industrial Hygiene and Occupational Medicine, 10(2), 91-123
- Voydanoff, P. and Kelly, R.F. (1984).
Determinants of work-related family problems among employed parents.
Journal of Marriage and the Family, 46, 881-892.
- Voydanoff, P. and Kelly, R.F. (1984)
Determinants of work-related family problems among employed parents.
Journal of Marriage and the Family, 46, 881-892.
- Wainwright, D. and Calnan, M. (2002).
Work stress: the making of a modern epidemic.
Buckingham: Open University Press.
- Walker v Northumberland County Council (1995).
IRLR 35
In P. Leighton: What has the law to do with stress prevention
Work and Stress, 8 (4), 283-285.

- Wallin, W. (1949).
 Personality maladjustments and mental hygiene.
 McGraw-Hill Book Company, Inc.
- Warr, P.B. (1982).
 Psychological aspects of employment and unemployment.
Psychological Medicine, 12, 7-11.
- Warr, P.B. (1983).
 Work, jobs and unemployment.
Bulletin of the British Psychological Society, 36, 305-311.
- Warr, P.B. (1987).
 Work, Unemployment and Mental Health.
 Cambridge University Press, Cambridge.
- Warr, P.B. (1990).
 Decision latitude, job demands and employee well-being.
Work and Stress, 4, 285-294.
- Warr, P.B. (1992).
 Job features and excessive stress.
 In: R. Jenkins and N. Coney (Eds): *Prevention of mental ill health at work*.
 HMSO, London.
- Weinstein, H. and Zappert, L. (1980).
 Stress and the working woman.
 Paper presented at the annual meeting of the American Psychological Association,
 Montreal.
- Welford, A.T. (1973).
 Stress and performance.
Ergonomics, 16, 567-580.
- Wells, K.B.; Stewart, A.; Hayes, R.D.; Burman, A.; Rogers, W.; Daniels, M.; Berry, S.;
 Greenfield, S. and Ware, J. (1989).
 The functioning and well being of depressed patients.
Journal of the American Medical Association, 262, 914-919.
- West, M.A. and Reynolds, S. (1995).
 Employee attitudes to work-based counselling services
Work and Stress, 9 (1), 31-44.
- Wessely, S. (2006).
 Randomised, controlled trials.
 In M. Slade and S. Priebe (Eds): *Choosing methods in mental health research*.
 London: Routledge.
- Whelan, L., Robson, M. and Cook, P. (2002).
 Health at work in the British National Health Service: a counselling response.
Counselling Psychology Quarterly, 15, 257-267.

Wilkinson, H. (2009) *The Muse as Therapist: A new poetic paradigm for psychotherapy*. Karnac Books Ltd.

Williams, R.L. and Tramontana, J. (1976).
Evaluation of occupational alcoholism programs.
In C. Schramm (Ed): *Alcoholism and its treatment in industry*, pp109-137,
Baltimore; The John Hopkins Univ. Press.

Wittgenstein, L. (1953) *Philosophical investigations*.
Trans. G.E.M. Anscombe. New York: Macmillan

Worrall, L. (1999).
Evaluation of the effectiveness of an employee counselling programme.
Unpublished PhD thesis, Dept of Psychology, Keel University.

Worrall, L.; Parkes, C. and Cooper, C.L. (2004)
The impact of organisational change in the perceptions of UK Managers.
European Journal of Work and Organisational Psychology.
Vol. 13, Issue 2, June 2004, pp 139-163

Wright, K. (1992).
A study of how training and stereotyping affects General Practitioners in their detection of mental health and their decisions to refer patients for psychotherapy/counselling.
Unpublished M.A. Thesis – Psychology Dept., University of Warwick.

Wright, K. (2003).
A study of how the race and sex of their patients affects General Practitioners' referral decisions for psychotherapy/counselling.
Paper presented to 32nd annual scientific meeting of the society for Academic Primary Care (SAPC), July, 2003.
and Paper presented to Lewisham, Southwark and Lambeth Research Support Unit
Conference: Research, Evaluation and Audit in Primary and Community Care. February, 2004.

Wyler, A., Masuda, M. and Holmes, T. (1968).
Seriousness of illness scale.
Journal of Psychosomatic Research, 11, 363-375.